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DECEMBER, 1961

Medical Journal

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The RHODE ISLAND MEDICAL JOURNAL

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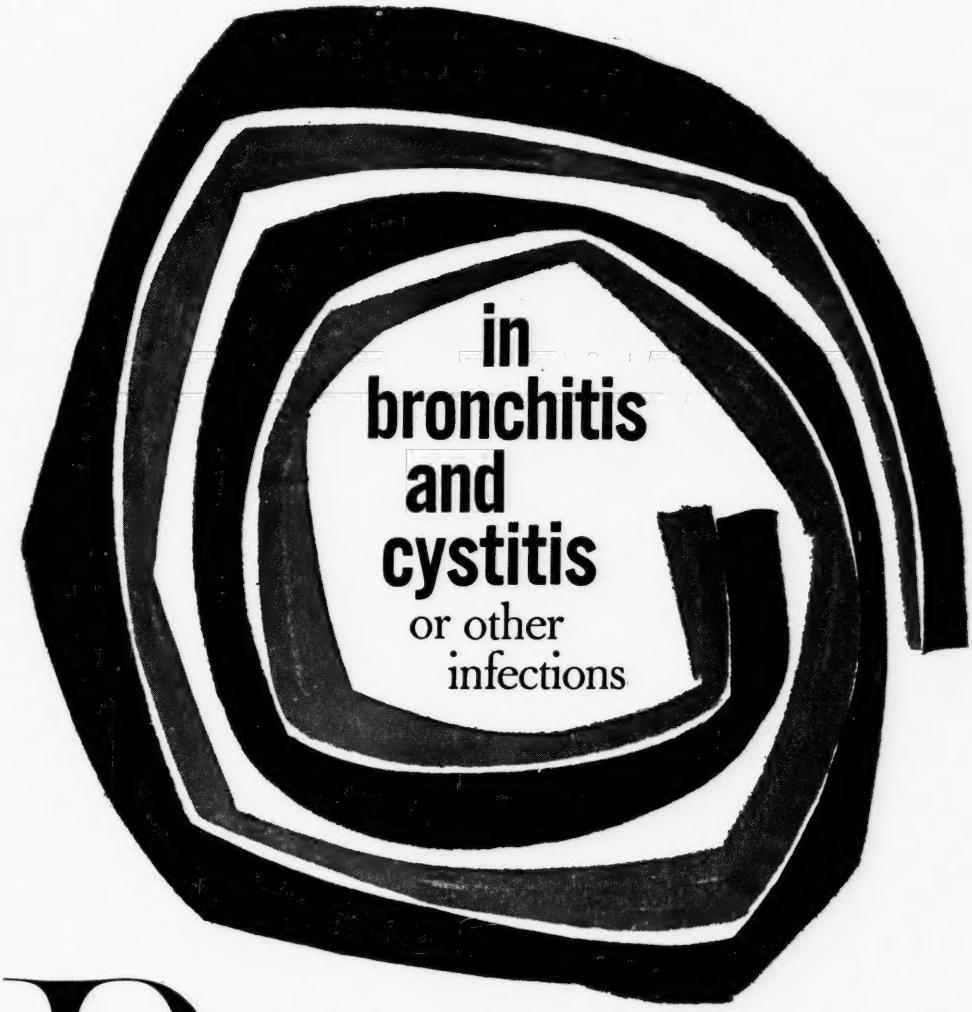

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CITIZENS HEALTH EDUCATION COMMITTEE

COMMUNITY LEADERS TO AID IN SESQUICENTENNIAL CELEBRATION OF THE RHODE ISLAND MEDICAL SOCIETY

OUTSTANDING COMMUNITY LEADERS have accepted the invitation to serve with Governor John A. Notte as a Citizens Health Education Committee to aid the Rhode Island Medical Society in its 150th year celebration in 1962, particularly in connection with the Exposition of Health Progress to be held at the Cranston Street Armory from April 6 to 15. The Committee held its organization meeting at a luncheon at the Sheraton-Biltmore on October 27, with the Society as host.

Speaking at the luncheon meeting of 40 civic, labor, health, education and business leaders, Doctor Samuel Adelson, Newport surgeon who is president of the Medical Society said, "The doctors of Rhode Island are obtaining some of the nation's most advanced educational exhibits which explain recent progress in health care and medical practice. The doctors have done this in observance of the 150th anniversary of the founding of the Rhode Island Medical Society."

Doctor Arnold Porter, *left*, and Doctor Samuel Adelson, right, standing in front of the painting of the founder of the Rhode Island Medical Society, Doctor Amos Throop, view Health Education Month proclamation issued by Governor Notte in connection with the Rhode Island Medical Society's Exposition of Health Progress to be held in April, 1962.

The event is called the *Rhode Island Exposition of Health Progress* and will be held April 6 through April 15. Doctor Adelson indicated that more than 75 exhibits will demonstrate in easy-to-understand terms the latest information available on weight control, nutrition, fitness, children's health, smoking, and many other important subjects.

Governor John A. Notte, Jr., also speaking at the luncheon, announced that he had proclaimed April, 1962 as *Health Education Month* and that he had formed a *Citizens Health Education Committee* to assist the doctors in spreading the latest health care information to all corners of the state.

According to Governor Notte, "All eighth grade children in the state will be invited to the Armory for guided tours during school hours in order to benefit from the important information that will be gathered there. We hope that all citizens will also benefit from this unusual free exposition."

In a brief ceremony, Governor Notte presented Doctor Adelson with a scroll proclaiming *Health Education Month.*

Speaking on behalf of the Medical Society's Sesquicentennial Committee which is handling arrangements for the Exposition of Health Progress, Doctor Thomas Perry, Providence surgeon, said, "Rhode Island's Exposition of Health Progress is similar to events which have been conducted in Kansas City, Columbus, Los Angeles, Miami, New York and several other cities.

"The purpose of these events is to expose the people to the most advanced, reliable information with which they can guard their health. Information is presented that is of pertinent interest to all types of people such as children, young parents, and those facing the problems of advancing age. Exhibits will be manned by doctors who will further explain points that are presented and answer questions. These expositions have been so enthusiastically received that many of the cities are planning to repeat them in the near future."

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CITIZENS HEALTH EDUCATION COMMITTEE

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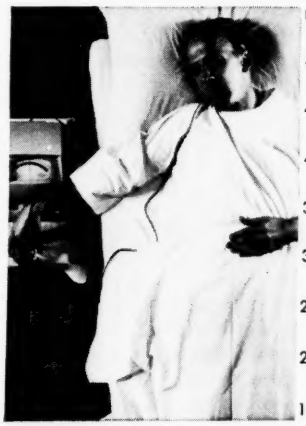

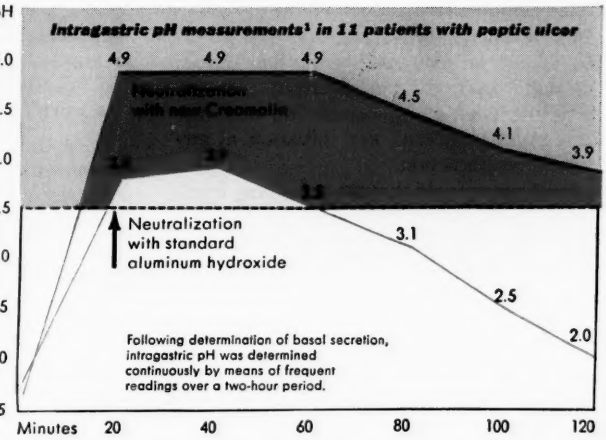

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References: **1.** Schwartz, I. R.: *Current Therap. Res.* 3:29, Feb., 1961. **2.** Beekman, S. M.: *J. Am. Pharm. A.* (Scient. Ed.) 49:191, April, 1960. **3.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:381, July, 1959. **4.** Data in the files of the Department of Medical Research, Winthrop Laboratories. **5.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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THE WASHINGTON SCENE

A Summary Report Prepared by the Washington Office of the American Medical Association

Radioactive Fallout

THE PUBLIC HEALTH SERVICE said that radioactive fallout levels resulting in the United States up until early November from the new series of Soviet nuclear explosions "do not warrant undue public concern" nor initiation of any special public health action.

The federal agency said that the prevailing levels were not high enough for the public to be concerned about the safety of milk and other foodstuffs.

But PHS added that "continuous, intensive surveillance" by federal, state and local governments was justified.

In a special statement issued after a two-day conference of government and private radiation experts, the PHS pointed out that "very little is known about the effects on animals or humans of very low but prolonged exposures" from either natural background radiation or fallout from nuclear tests.

"The consensus of scientific opinion is that the most prudent course is to assume there is no level of radiation exposure below which one can be absolutely certain that harmful effects may not occur to at least a few individuals when sufficiently large numbers of people are involved," the PHS said. "This is known as the 'non-threshold' concept."

This concept is the basis for U.S. policies and programs for assessment of radiation hazards and for control measures designed to limit exposures of the population, the PHS said and added:

"When this non-threshold concept is applied to present radiation exposure levels being experienced in the U.S. from all sources, including fallout, the following assessment can be made:

> "The extra radiation caused by the Soviet tests will add to the risk of genetic effects in succeeding generations, and possibly to the risk of health damage to some people in the United States. It is not possible to determine how extensive these ill effects will be — nor how many people will be affected. At present radiation levels, and even at somewhat higher levels, the additional risk is slight and very few people will be affected. Nevertheless, if fallout increased substantially, or remained high for a long time, it would become far more important as a potential health hazard in this country and throughout the world.

"It is the obligation of our federal and state governments to undertake all possible measures to assess accurately the public health significance of the present fallout situation, and to prepare for actions to safeguard the public health if these become necessary."

Federal officials said radioactive fallout on the United States will increase next February, March, April and May when the late winter and spring rains wash to earth the remainder of the fallout from the Soviet nuclear tests but it isn't expected to reach a danger level. President Kennedy said any U.S. nuclear tests in the atmosphere would be designed to hold radioactive fallout to an absolute minimum.

The PHS said that the nation's health authorities are giving careful consideration to the possible situations that might require various corrective actions.

"It is evident that an important element of health protection is continuous surveillance and analysis," the PHS said.

"To achieve this, a number of federal-state systems for public health surveillance, detailed investigation, and radiation control measure have been developed . . . In co-operation with state and local health departments, the PHS operates a nationwide early warning atmospheric radiation surveillance network currently comprised of 58 stations, and a 60-station milk radiation monitoring system. In addition, the PHS has well-established networks for general air and water pollution monitoring with a total of 343 stations. All of these include radiation monitoring among their capabilities and all are being expanded. For example, daily samples of drinking water are being collected in twelve major cities and analyzed for specific radioactive content on a weekly basis, and plans are ready for more extensive monitoring if necessary. Rounding out the PHS resources is a system of highly specialized regional radiological health laboratories.

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THE WASHINGTON SCENE

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"The Food and Drug Administration has expanded its program of monitoring the levels of radioactive contamination in foods. Working through eighteen district offices and thirty-nine resident inspection stations, its inspectors are sampling foods from all parts of the nation; particularly those areas where the Public Health Service's air monitoring network has indicated the highest concentration of atmospheric contamination. Additionally, FDA collects samples from selected lots of food being imported into the United States.

"These samples are being analyzed for total beta activity and selected samples are further tested to determine what specific radioisotopes are present and in what amount.

"In addition there are the extensive special-purpose radiation surveillance and research facilities of the Atomic Energy Commission and the Departments of Defense, Commerce, and Agriculture.

"All federal programs and resources work in close concert, and follow the same radiation protection standards, through the co-ordinating influence of the Federal Radiation Council . . .

Supplementing these federal programs and resources is a steadily increasing radiological health capability among state and large city governments. Their programs are usually centered in the departments of public health, with certain special responsibilities often located in other agencies such as state or city departments of public safety. At every level of government, resources and programs are being expanded to cope with the potentially hazardous situation the nation now faces.

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The RHODE ISLAND MEDICAL JOURNAL

VOL. XLIV DECEMBER, 1961 NO. 12

CONGENITAL ATRESIAS OF THE GASTROINTESTINAL TRACT

ROBERT L. BERGER, M.D.; JOSEPH DOLL, M.D., AND ORLAND F. SMITH, M.D.

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Joseph Doll, M.D., Chief, Pediatric Service, Memorial Hospital, Pawtucket, Rhode Island.

Orland F. Smith, M.D., Surgeon-in-Chief, Memorial Hospital, Pawtucket, Rhode Island, Clinical Instructor in Surgery, Boston University School of Medicine.

CONSIDERABLE PROGRESS has been made within recent decades in the treatment of congenital atresias of the gastrointestinal tract. We are recording our first successful experience with a case of duodenal atresia in a female infant, and shall at the same time highlight the salient features of this lesion.

Case Report

A female infant (MH 176118), born of a hydramnios mother apparently at full term, failed to pass meconium during the first twelve hours of life. A questionable diaphragm was felt on rectal examination, but a barium enema revealed a normal large bowel. On the second day of life, the infant was unable to retain any of her feedings, and her abdomen became distended. On the fourth day, a barium study of the upper digestive tract revealed a markedly distended stomach and duodenum with a constrictive band at the level of the pylorus creating an hourglass deformity. The leading point of the barium was at the distal part of the second portion of the duodenum. The infant by this time was dehydrated, and because of her precarious condition, after proper resuscitative measures emergency surgery with local anesthesia was decided upon. At operation, the earlier impression of duodenal atresia was confirmed. The atretic portion, a four-millimeter cord-like structure, was located between the second and third portions of the duodenum. A side-to-side bypass duodenojejunostomy was performed with considerable difficulty, but without incident. The gastrointestinal tract became functionally patent on the seventh postoperative day and the baby began to thrive. Follow-up at two-and-one-half years showed a normally active, healthy child who ate everything, slept well, was growing rapidly, and showed no evidence of retarded mentality, or other abnormality.

Discussion

The word "atresia" is derived from the Greek word *atretos*, meaning "nonperforated." Congenital atresia, including all forms of intrinsic narrowing up to total occlusion, is of rare occurrence. The incidence is estimated at one in ten to twenty thousand births. The first case was reported by Binninger[1] almost three centuries ago. Meckel[2] wrote on the subject in a booklet published in 1812.

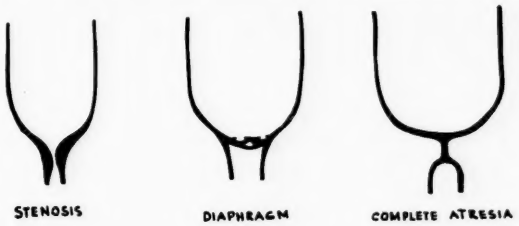

FIGURE 1

Weeks[3] in 1916 described a successfully treated case. By 1951, there were 1,498 cases reported in 1,353 articles.[4] In spite of the rare occurrence of this disease, awareness of the existence of the lesion is crucial. If undiagnosed, it is a rapidly progressive lethal deformity; while recognition of the problem with timely surgery has saved the lives of an increasing number of infants.

There are a number of theories on the pathogenesis of congenital atresia. According to the most widely held belief, proposed by Tandler[5] in 1902, the lumen of the primitive tube-like gut in the five-week embryo becomes obliterated by proliferating epithelial cells. Normally, patency is re-established towards the end of twelve weeks by coalescing vacuolization of these redundant cells. Failure of the recanalizing process results in varying degrees of narrowing.

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The high incidence of hydramnion in mothers of infants with atresia is an incompletely understood phenomenon. According to some observers, the fairly constant level of amniotic fluid is maintained by absorption of swallowed amniotic fluid through the intestinal tract of the fetus. A high intestinal obstruction excludes a large absorptive surface from functioning as stabilizer of the amniotic fluid level. Of further note is the unexplained high incidence of mongolism with duodenal atresia.

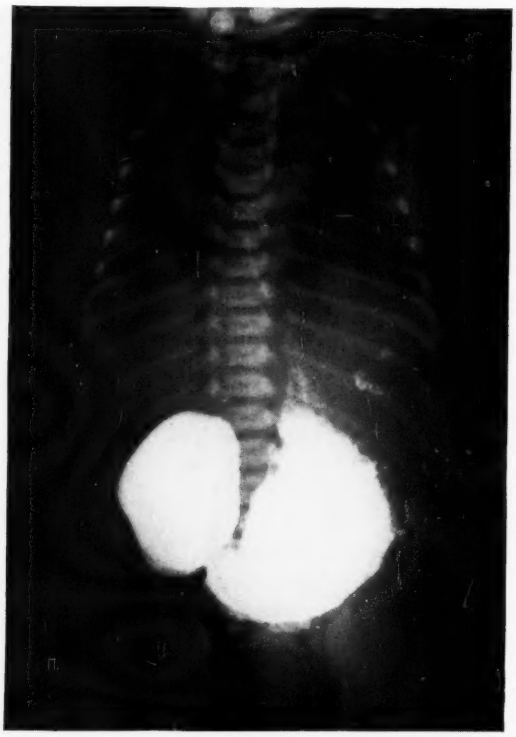

FIGURE 2

Anatomically, the lesion may consist of a complete diaphragm, or one with single or multiple perforations (Figure 1). The second form is stenosis or narrowing of varying length and width (Figure 2). In the third variety, there is complete obstruction of the bowel with or without a connecting cord between the proximal and distal limbs. The ileum is affected most commonly, followed by the duodenum, jejunum, and colon in descending order of frequency. Involvement of the ileocecal valve is extremely uncommon. Multiple lesions are seen in about six per cent of the cases.

As in any instance of intestinal obstruction, the stomach and the bowel proximal to the occlusion become distended by swallowed air and intestinal secretions. Distal to the obstruction the bowel is small and collapsed. Distention of the proximal bowel may lead to focal ischemia and perforation. The resulting peritonitis is almost invariably fatal.

In infants having complete atresia of the duodenum, symptoms become manifest on the very first day of life. Vomiting, especially after feedings, is the major symptom, and it becomes progressively more intense and frequent. Since the level of obstruction is almost always below the ampulla of Vater, the vomitus contains bile. Although the baby may have bowel movements, the amount of stool is usually small, and it is grayish-green in color. The degree of abdominal distention varies with the age of the child and the effectiveness of vomiting in emptying the stomach of its contents. If enough amniotic fluid is swallowed during the last few days of intra-uterine life, distention may be noticeable even at birth. Peristaltic waves may commonly be seen to progress from left to right over the upper abdomen. The baby becomes increasingly dehydrated and cachectic. This may account for some fever, but a temperature of 103°F or above usually indicates perforation with peritonitis.

The above picture is characteristic of complete duodenal atresia. Atresia at lower levels produces an essentially similar clinical picture with a slightly slower course, but perhaps more distention. Incomplete duodenal atresia on the other hand is usually manifested by bouts of vomiting and distention at intervals of months or even years. The diagnosis may not become apparent until the teen-age period although more commonly, when solid feedings are added to the diet, thus converting a partial into a total obstruction.

In the presence of a suggestive clinical picture, a flat film of the abdomen usually confirms the diagnosis. There is gaseous distention proximal to the obstruction, with narrowing at the pyloric ring creating an hourglass configuration. At times, however, barium studies are essential, though they are not without certain dangers. Aspiration of the ingested barium and plugging of an incomplete obstruction are dreaded complications. In order to minimize these risks, the use of a thin barium solution is advised.

The Farber[6] Test is a useful laboratory aid. In 1868, Jacoby,[7] a New York pediatrician, first noted the significance of epithelial cells in the meconium. Farber devised a staining method for the epithelial cells and popularized the test. The test is based on the principle that epithelial cells are swallowed from the amniotic fluid and normally pass with the meconium through the patent digestive tract. Conversely, in the presence of intestinal obstruction no such cells are to be found in the meconium. The test is performed by staining the meconium on a glass slide with gentian violet and then decolorizing with alcohol. Only the epithelial cells retain the dye and thus become prominent under the microscope.

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MALROTATION OF THE DUODENUM AND INTERMITTENT EPIGASTRIC MASS*

JOHN R. STUART, M.D.; WALDO O. HOEY, M.D., AND LLOYD LAGERQUIST, M.D.

The Authors. *John R. Stuart, M.D., Junior Surgeon; Waldo O. Hoey, M.D., Chief of Surgery; Lloyd Lagerquist, M.D., Physician, Medical Service; all of Roger Williams General Hospital, Providence, Rhode Island.*

IN COMMON MEDICAL USAGE the term malrotation is usually associated with a gross embryological error causing intermittent or complete intestinal obstruction during infancy or childhood. The twenty-third edition of Dorland's MEDICAL DICTIONARY defines malrotation as "abnormal or pathological rotation as of the spinal column."[3] In actuality malrotation is a very general term and includes non-rotation, incomplete rotation, and reversed rotation. Associated anomalies of fixation may result in common mesentery, mobile cecum, persisting mesenteries of the ascending and descending colons, anomalies of the omentum, paraduodenal hernia, and other types of internal hernias.[2,4,6,7,10] Anomalies may also be divided into those occurring in the pre- and those in the post-arterial segment of the midgut.[4] Endless anatomic varieties are possible.[11] The presenting signs and symptoms of malrotation need not be those of intestinal obstruction, and patients may reach adulthood before they are first manifest. A recent case treated by the authors presented an unusual variation of midgut rotation and an unusual physical finding.

Case No. 205603. A forty-one-year-old white male admitted to the Roger Williams General Hospital with a chief complaint of intermittent epigastric pain radiating to the mid-dorsal back of four weeks duration. The pain was described as a severe discomfort and would usually occur two to three hours postprandially. Partial relief could be obtained by "doubling up." Excessive belching and some nausea had also been present during this period but were not related to the pain. There was no history of emesis, heartburn, indigestion, abdominal distension, fever, or diarrhea. Physical examination revealed a husky white male with a blood pressure of 130/80. Initially a questionable epigastric mass was palpated. Repeated examinations confirmed the presence of a smooth, tender, pulsatile epigastric mass measuring approximately three by five cms. which did not move with respirations. This mass was not constantly present and at times unrelated to food, position or activity was completely absent. There was a fair correlation between the presence of the mass and the presence of pain. There was no bruit and no other positive abdominal findings. The right femoral, popliteal and dorsalis pedis pulses were diminished (3 plus out of 4). Studies included a CBC, urinalysis and a serum amylase which were all within normal limits. The stool was guaiac negative. An EKG was within normal limits.

Course in Hospital. During the first hospital week the patient was placed on an ulcer regimen while various other studies were performed. A chest film and cholecystogram were within normal limits. An upper gastrointestinal series was also within normal limits and revealed no evidence of hiatus hernia, gastritis, or peptic ulceration. A small bowel series revealed that the duodenum passed downward to the right, made an anterior loop upon itself, and continued downward on the right (Figures 1 and 2). There was no dilatation or spasm of the

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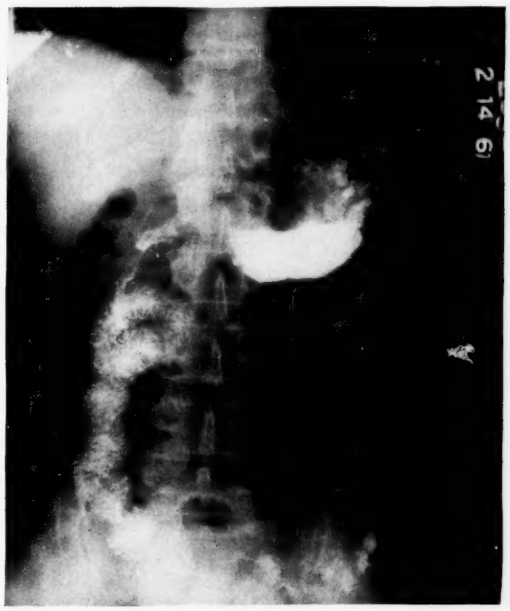

FIGURE 1

*From the Department of Surgery, Roger Williams General Hospital, Providence, Rhode Island.

duodenum and there was no evidence of a mass in this area. A barium enema was normal. The patient continued to experience pain without change, and an exploratory laparotomy was recommended. Preoperative diagnoses ranged from a dissecting aortic aneurysm, to carcinoma of the pancreas, to an anomaly of the small bowel. Laparotomy revealed the aorta, stomach, and the duodenal bulb to be normal. The gallbladder was thin walled and emptied readily. No stones were palpable in the external biliary ducts. The pancreas was normal in size and consistency. There were congenital adhesions between the gallbladder and the duodenum which were not significant. All portions of the colon were in their usual locations and fixation was normal. The gastrocolic ligament and the omentum revealed no defects. The duodenojejunal junction was on the right and posterior to the proximal transverse colon. Dissection proximal to this junction revealed that the distal second, third, and fourth parts of the duodenum formed an anterior retroperitoneal loop fixed in position by an abundance of fibrous tissue. The duodenum was not dilated but two kinks were present in the loop. The upper medial root of the small bowel was thickened and was mobile. The mobility was limited by the superior mesenteric vessels; however, it was possible for this portion of the small bowel mesentery to be either in the right paravertebral gutter or in the midline and over the aorta. In the former position it was inconspicuous to the palpating hand; in the latter position it presented as a smooth mass with transmitted pulsations. The procedures which were carried out consisted of lysing the retroperitoneal fibrous tissue, freeing the duodenum and straightening out the kinks, and an incidental appendectomy. No attempt was made to restore the usual location of the duodenojejunal junction or to anchor the upper small bowel root. The postoperative course was satisfactory and uncomplicated. The patient was enjoying a regular diet in five days. In a four-month follow-up period the patient has continued to do well and has experienced no further pain.

Discussion

In 1923 Dott called attention to abnormalities of midgut rotation and their embryological and surgical aspects.[4] This paper is widely quoted and lucidly describes the process of rotation and some of the anomalies which may occur. The majority of patients with malrotation who come to the surgeons' attention have incomplete rotation of the cecum with partial or complete obstruction of a normally located descending duodenum due to associated fibrous bands.[5,7] Ladd in 1933 described a procedure whereby these bands were lysed and the duodenum freed up.[9] This satisfactorily corrected the external duodenal stenosis and obviated the need for more formidable by-passing procedures.

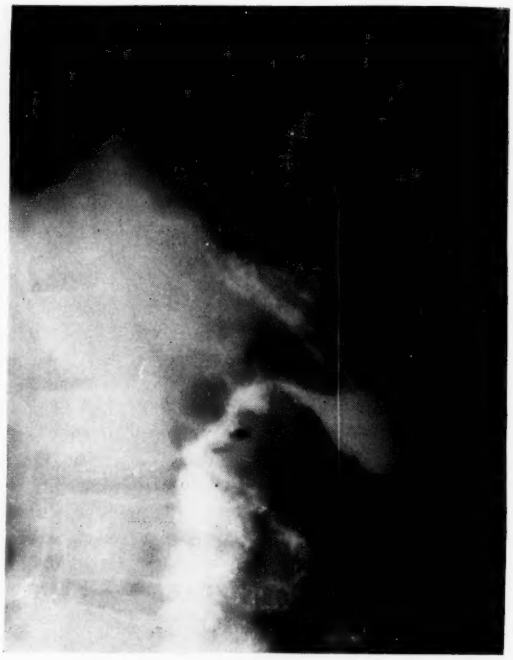

FIGURE 2

In the case presented malrotation of the duodenum was present although the cecum had rotated normally, and fixation of the colon was normal. There was no definite evidence of duodenal obstruction present; however, there were two definite kinks present in the duodenal loop. One may speculate that the patient's symptoms were caused by traction on the fixed duodenum when the mesenteric root was in the midline. The simulation of a smooth, tender, pulsatile epigastric mass by a mobile and thickened mesenteric root is unique to our knowledge.

There are many anatomic types of malrotation, and each may have its variations; therefore there may be many variations in the clinical picture.[8,11] Although abnormalities of midgut rotation and fixation are responsible for obstructive symptoms in adults more frequently than realized, obstruction need not be present for the patient to have complaints.[2] The patient may complain of abdominal pain which occurs in an unusual pattern, and there may be other complaints of a vague and transient nature such as excessive gas, nausea, vomiting, or difficulty in expelling gas.[1,10] Many times physical signs may be absent and the clinical picture may be attributed to psychoneurosis.[10]

In one series of cases it was found characteristically that permanent radiological evidence of incomplete small bowel obstruction was present whether

the patient had complaints or not.[1] The case presented demonstrates that malrotated duodenal segments may be symptomatic despite a lack of obstructive signs and symptoms.

SUMMARY

1. The term malrotation is very general and includes many anatomic varieties and many clinical pictures.

2. A case of malrotation of the duodenum with normal rotation and fixation of the colon and a mobile portion of the small bowel mesentery simulating an epigastric mass is presented.

3. A modified Ladd procedure served as sufficient correction without creating the usual anatomic position of the duodenum.

4. Malrotated duodenal segments may be symptomatic despite the lack of clinical and X-ray evidence of obstruction.

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CONGENITAL ATRESIAS OF THE GASTROINTESTINAL TRACT

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The presence of a functionally significant intestinal atresia is indication for operative intervention. There are a few technical points worthy of mention. Gastroenterostomy, attractive as it may seem, should not be employed. Food passes into the blind duodenal stump, which becomes distended and dumps its contents back into the stomach, thus inducing vomiting. An exception to this rule is atresia of the first portion of the duodenum in the premature infant whose tiny intestine is too small for safe duodenojejunostomy. Another principle in the treatment of atresia is that an intestinal diaphragm should not be directly attacked surgically, as experience has shown that satisfactory correction by local excision of the diaphragm is unlikely. Lastly, electrolyte disturbances created by enterostomy losses are too severe for accurate and effective replacement therapy. Therefore, cutaneous enterostomies should be avoided. The cardinal principle in surgical therapy of atresia is employment of a side-to-side bypass anastomosis, utilizing the segments immediately proximal and distal to the lesion. The only exception to this rule is an iliac lesion, where side-to-side anastomosis carries a high mortality. In this case all exteriorization procedure is indicated. Thorough examination of the entire small bowel should be an integral part of the operation, since about six per cent of all atresias are multiple.

Since the employment of these principles and with the vast improvements in anesthesia and fluid therapy, now available, great strides have been made in the treatment of intestinal atresias. The over-all outlook, however, is still grim. In 140 cases operated upon at the Children's Medical Center in Boston, the mortality rate prior to 1940 was about 85 per cent although during the period between 1940 to 1952 it was reduced to less than 50 per cent. The average length of survival was only 5.8 days. The two leading causes of death were malnutrition with dehydration and peritonitis.

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HYPOGAMMAGLOBULINEMIA ASSOCIATED WITH PERNICIOUS ANEMIA

Report of a Case and Review of the Literature

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AGAMMAGLOBULINEMIA, or hypogammaglobulinemia as it is now designated by many authors, was first described in 1952 by Bruton.[1] His patient, an eight-year-old boy, experienced eighteen bouts of sepsis. A deficiency of gammaglobulin was demonstrated, and recurrent infection controlled by repeated injections of gammaglobulin. In 1954, this clinical entity was first described in an adult female.[2] During the past seventeen years, approximately 150 cases have been reported in the medical literature.[3] In 1957, agammaglobulinemia associated with pernicious anemia was reported by Lewis and Brown.[4] Since then two additional reports of a similar association have been described.[5,6] The following is a report of a patient who has pernicious anemia and hypogammaglobulinemia.

Case History

R.V., R.I.H. 612958. This fifty-six-year-old white male was admitted to the Rhode Island Hospital in Providence, Rhode Island, on March 26, 1959, because of extreme weakness, pallor, and shortness of breath. For the past month, he had had shortness of breath which had become increasingly severe. In addition, he had noted substernal chest pain with radiation down both arms appearing with the slightest exertion. In spite of this, he continued to work until the time of admission. He also complained of paresthesias of both hands and soreness of the tongue. He gave a previous history of repeated urinary tract infections associated with dysuria. In August of 1956, he had been admitted to the Memorial Hospital in Pawtucket, Rhode Island, for dysuria. A segmental resection of the dome of the bladder was performed for a bladder diverticulum. Six days after surgery, he developed a right hemiparesis which cleared in a few days, leaving only a residual weakness of the right leg. At that time he was seen by a neurological consultant who felt that the patient had had a cerebral thrombosis.

Physical examination revealed a well-developed, fairly well-nourished white male presenting a marked pallor of the skin and mucous membranes. He was extremely dyspneic and appeared quite ill. Temperature 101°F, respirations 20, pulse 110, and blood pressure 160/80. There were hemorrhages in both retinae and some rare soft exudate was noted. The tongue was smooth and red. The heart was enlarged to percussion, and a grade III apical systolic murmur radiating to the left sternal border was noted. The liver and spleen were not palpable and there was no lymphadenopathy. There was 3 plus edema of both ankles and legs. The neurological examination revealed slight weakness of the right leg. All the deep reflexes were hyperactive. The prostate gland was moderately enlarged. X-ray examination of the chest revealed a normal heart contour and an irregular shadow 1 cm. in diameter in the left base just above the diaphragm which was thought to be an old fibrotic process. A gastrointestinal series showed the presence of a duodenal diverticulum in the third part of the duodenum. Examination of the blood revealed a hemoglobin of 3.5 gms. per 100ml, red blood cell count 0.96 million, and a microhematocrit of 10.5 per cent. The white cell count was 7750 with 65 per cent neutrophils. A blood smear disclosed the red blood cells to be macrocytic. Blood indices revealed the mean corpuscular volume to be 109, the mean corpuscular hemoglobin 36, and the mean corpuscular hemoglobin concentration 33 per cent. The fasting blood sugar was 105 mg.; blood urea nitrogen 13 mgs. per cent; total protein 7.2 gms./100cc with 4.4 gms. of albumin and 2.8 gms. of globulin. Paper lectrophoresis (Table 1) showed a marked decrease of gammaglobulin. The serological test for syphilis was negative. Gastric analysis with histamine stimulation showed an absolute achlorhydria. The blood was determined as type A, RH positive with no anti-A or anti-B agglutinins present on direct or indirect Coomb's testing. Cholesterol, cholesterol esters, cephalin flocculation, and thymol turbidity were normal. Study of the bone marrow aspiration revealed a megaloblastic hyperplasia. It was also noted that there was a sparsity of plasma cells. Several stools were negative for occult blood. The patient demonstrated a 1.5% uptake of cobalt

TABLE 1

	Normal Values	3/31/59	4/12/60	1/31/61
Total Proteins	6.0-8.0 gm / 100ml	7.2 gm / 100ml	6.3 gm / 100ml	5.7 gm / 100ml
Albumin	3.2-4.6 gm / 100ml	4.5 gm / 100ml	4.5 gm / 100ml	4.0 gm / 100ml
Alpha 1 Globulin	0.2-0.4 gm / 100ml	0.5 gm / 100ml	0.25 gm / 100ml	0.3 gm / 100ml
Alpha 2 Globulin	0.5-1.2 gm / 100ml	0.5 gm / 100ml	0.61 gm / 100ml	0.5 gm / 100ml
Beta Globulin	0.7-1.1 gm / 100ml	1.0 gm / 100ml	0.62 gm / 100ml	0.6 gm / 100ml
Gamma Globulin	0.7-1.4 gm / 100ml	0.2 gm / 100ml	0.33 gm / 100ml	0.3 gm / 100ml

tagged cyanocobalamine as measured by urinary excretion. The electrocardiogram showed a pattern of ischemia over the anterior wall of the myocardium.

On admission, the patient had a temperature of 101°F. He was immediately digitalized and placed on diuretics. This was followed by a good diuresis. Initially, it was requested that the patient be typed and cross-matched for possible transfusion if needed; however, the laboratory reported that he had an absence of alpha-beta-iso-hemo-agglutinins. This latter finding aroused my curiosity and further investigation of the plasma proteins revealed hypogammaglobulinemia. The diagnosis of pernicious anemia was established by the appearance of the blood smear, the presence of absolute achlorohydria, the Schilling test, and the bone marrow study. The administration of cyanocabalamine was started, and by the sixth hospital day his reticulocyte count subsided without antibiotics. The remainder of his hospital stay was uncomplicated. On discharge, his hemoglobin was 7.2 gms. per cent with a microhematocrit of 24. He was maintained on digitalis for a short period but this was later discontinued. Since discharge, the patient has been receiving intramuscular injections of cyanocobalamine at monthly intervals. The hemoglobin and hematocrit have remained in the realm of normal. A gastrointestinal series performed one year later showed the presence of a fairly large hiatus hernia of the sliding type. There was no evidence of gastric neoplasm.

In April, 1960, he was admitted to the Memorial Hospital for the repair of a right inguinal hernia. Because he had not experienced any previous infections it was decided not to give him gammaglobulin or prophylactic antibiotics, but to follow him carefully. His course was uncomplicated and he was discharged on the seventh post-operative day.

In January, 1961, he had a recurrence of the inguinal hernia on the right side and was again admitted to the Memorial Hospital. On admission, he had a mild upper respiratory infection and the operation was deferred for several days. One day post-operatively, the patient developed chilly feelings, sweating, and a temperature of 102.2°F. He had a few inspiratory rales at the left base. The white blood cell count was 17,400 with 72 per cent polymorphonuclear leukocytes with a hemoglobin of 13.5 gms. per cent. A chest X-ray revealed a pneumonitis of the left lower lobe, and a sputum culture was positive for pneumococci. The patient was treated with tetracyclin, and by the third post-operative day he was afebrile. He was discharged one week later. In April, 1961, the patient began to experience some dysuria. Examinations disclosed infection in the urinary tract and he was treated with appropriate antibiotics and later admitted to the Memorial Hospital where a transurethral prostatectomy was performed. He was in the hospital for ten days and made an uneventful recovery without gammaglobulin or prophylactic antibiotics.

Discussion

Agammaglobulinemia is a congenital or acquired syndrome characterized by the following: (1) increased susceptibility to bacterial infections with a history sometimes dating to childhood; (2) extremely low concentrations of gammaglobulin in the blood; (3) absence of antibody from the blood and tissues; and (4) failure of antibody production in response to antigenic stimulation. The normal range of serum gammaglobulin is about 600 to 1200 mg. per 100ml of serum.[7,8] Although the term agammaglobulinemia implies an absence of gammaglobulin in the plasma, the deficiency is usually not complete. The level of gammaglobulin is usually less than 30 mg. per 100ml of serum. It is now felt that a concentration of 150 to 200 mg. per 100ml is necessary to protect against bacterial infection;[9] therefore, the diagnosis of agammaglobulinemia should not be made when the serum gammaglobulin is greater than 150 mg. per 100ml of serum.

Agammaglobulinemic individuals may be divided into four groups:[7] (1) congenital agammaglobulinemia; (2) acquired or adult agammaglobulinemia; (3) secondary hypogammaglobulinemia; and (4) transient or physiologic hypogammaglobulinemia.

Congenital Agammaglobulinemia: This syndrome is observed in children and is characterized by recurrent bacterial infections beginning in infancy or early childhood.[8] It is felt that this form of agammaglobulinemia reflects an inborn error of metabolism transmitted genetically either as a sex-linked recessive or as a sex-limited dominant trait.

continued on next page

These patients frequently have poorly developed lymphoid tissues, frequent hematologic abnormalities, a high incidence of rheumatoid and collagen disease, and a high incidence of chronic pulmonary disease, particularly bronchiectasis.

Secondary Hypogammaglobulinemia[10] is frequently observed as a manifestation of many systemic diseases. Apparently, these patients develop hypogammaglobulinemia as a result of some diffuse disease of the recticuloendothelial system which interferes with the production of antibodies by normal plasma cells.

Transient Hypogammaglobulinemia[8] is temporary deficiency in circulating plasma gammaglobulin occurring in the first few months of life. Serum gammaglobulin levels are normal in the newborn infant but drop in the first month of life. After the third month, the levels again begin to rise and reach adult values at about two years of age.[11]

Adult or Acquired Agammaglobulinemia[8] occurs in later life, in both males and females. Patients suffering from this form of the disease, after a period of well being, begin to have repeated bacterial infections.

More recently another form of agammaglobulinemia has been described[12] which is also thought to be congenital. It occurs in females, and probably in males, and is usually less complete than the other type of congenital agammaglobulinemia. It is usually associated with enlarged lymphatic organs and often with hemolytic anemia.

The symptoms of agammaglobulinemia are directly related to the deficiency or absence of circulating gammaglobulin.[8] In congenital agammaglobulinemia, however, gammaglobulin is also absent in the tissue; thus the circulating deficit is part of a total body deficit.[8] It is now well established that the plasma cells and the lymphocytes are the sites of antibody and gammaglobulin formation.[13] The majority of investigators believe that the reticuloendothelial cell is the precursor of the plasma cell.[14] As a result of the failure to produce antibodies, agammaglobulinemic patients of both the acquired and congenital types show evidence of gross immunologic inadequacy. These patients lack antibodies to diphtheria toxin and streptococcal products, such as streptolysin O.[3] In addition, although most of them have had mumps as a clinical disease, they regularly lack mumps complement-fixing antibodies in their serum.[3] They also lack demonstrable amounts of herpes simplex neutralizing antibodies and poliomyelitis virus neutralizing antibodies.[3] It is of interest that, in spite of the fact that these patients are incapable of producing a satisfactory immune response to virus antigens, they have a surprising capacity to resist viral infection.[15,16] It has recently been suggested, however, that the agammaglobulinemic patients may be inordinately susceptible to the virus responsible for serum homologous jaundice.[3] Several agammaglobulinemic patients have been reported who developed homologous serum hepatitis, and in these patients the disease has been progressive and destructive. Whatever the basis may be, the relative lack of susceptibility to certain virus diseases and the high degree of susceptibility to certain bacterial infections are the striking clinical characteristics of the agammaglobulinemic patient.

Diagnosis

The tests used to establish the diagnosis of agammaglobulinemia have been separated into two groups: presumptive and definitive.[17] Presumptive tests aid in the diagnosis but do not definitely prove or exclude the presence of the condition.

Presumptive Tests: 1. *Total Serum Globulin:* Since about one half of the reported concentration is gammaglobulin, agammaglobulin may cause a low level of total globulin. 2. *Isohemaglutin Titers:* Agammaglobulinemic patients have a deficiency of isohemaglutinins and demonstrations of their absence during blood grouping is a good screening test for the disease in patients with blood groups O, A and B. The test is of no value for patients with blood group AB. 3. *Response to Antigenic Stimulation:* Patients with the disease have persistently positive Schick and Dick reactions. 4. *Zinc Sulfate Turbidity Test:* This test has been recommended as a good screening test.[18] It gives a semi-quantitative estimate of the concentration of gammaglobulin in the serum. 5. *X-ray Findings:* Many patients with agammaglobulinemia show extensive pulmonary parenchymal disease with paradoxical absence of hilar node enlargement and striking deficiency of nasopharyngeal lymphoid tissue. In addition, many patients show a pansinusitis.[19]

Definitive Tests: 1. *Electrophoresis of Serum:* Paper electrophoresis is one of the most reliable screening tests for agammaglobulinemia. The technique is quite simple and only a small quantity of blood is needed. The gammaglobulin is usually reported as a percentage of the total protein per 100ml of serum. Normal value ranges from 12 to 16 per cent. The electrophoretic technique as described by Tiselius is also a satisfactory procedure but more expensive equipment is needed. 2. *Immunochemical Quantitation:* Immunochemical methods offer the only satisfactory means of measuring low concentrations of gammaglobulin.[17] The precipitin method is the best of these techniques. Such methods demonstrate that most of these patients have small amounts of gammaglobulin present, and therefore the term hypogammaglobulinemia is more appropriate rather than agammaglobulinemia. With these techniques it has been shown that patients with

acquired agammaglobulinemia have slightly more gammaglobulin than patients with the congenital type. In both types, the concentration seldom exceeds 100 mgs. per 100ml of serum.

Treatment

Antibodies and concentrated gammaglobulin have proven of value in the treatment of agammaglobulinemia. Therapy should be directed towards treating the acute infection and preventing recurrent infections with gammaglobulin. A dose of 0.1 gms. of gammaglobulin per kilogram of body weight intramuscularly every 30 days has given adequate protection to most patients. It should be noted that the prophylactic dose of gammaglobulin may vary in different patients due to the fact that gammaglobulin is a heterogenous substance containing many different antibodies which have varying rates of degradation (ranging from 17 to 58 days). The dosage of gammaglobulin is based on the life of injected gammaglobulin which ranges between 13 and 32 days.[20] A level of 100 to 150 mg. of gammaglobulin per 100ml of serum seems to be the minimum necessary to prevent infection, a level easily obtained by the injection of 0.1 gm. per kilogram of body weight.[8]

SUMMARY

A patient having hypogammaglobulinemia associated with pernicious anemia is reported. To our knowledge only three cases of agammaglobulinemia and pernicious anemia have previously been reported. One of these also had diabetes mellitus. Another had multiple allergies associated with this combination. The significance of the appearance of agammaglobulinemia and pernicious anemia in the same person is unknown. There have, however, been a number of reports of hematolgic aberrations associated with agammaglobulinemia. It is of interest that both of these diseases have hereditary tendencies. It is felt that our patient has not shown the usual susceptibility to bacterial infection because his level of gammaglobulin is still high enough to afford him some protection.

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FUNCTIONING TUMORS OF THE OVARY

Rhode Island Hospital Experience, 1943-1958

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FUNCTIONING OVARIAN TUMORS are a very interesting group of neoplasms; all gynecologists, general surgeons, endocrinologists or internists are medically stimulated when the pieces fit, and an accurate diagnosis can be made. Any woman who appears overly masculine and a little hairy, and has a coarsened voice, flat breasts, and a male escutcheon is immediately suspected of having arrhenoblastoma. Similarly, precocious menstruation and post-menopausal bleeding arouse interest in granulosa cell and theca cell tumors. The disappointing thing is that these tumors are quite rare, the suspected arrhenoblastoma usually turning out to be familial or functional hypertrichosis, and the granulosa cell tumor a polyp, endocrine dysfunction, or endometrial carcinoma.

Granulosa cell tumors represent about 3 per cent of all ovarian tumors; thecomas, dysgerminomas, and arrhenoblastomas are even more rare. All tend to be unilateral, and except for the thecomas, have a high incidence of malignancy, the potential of which varies in direct proportion to the pathological grading of the tumor. This is a feature common to all types of ovarian carcinoma, as emphasized by Taylor, and is very important in prognosis. This finding is in direct variance to that in cervical carcinoma, where pathological grading is of little if any value prognostically.

In the past 15 years, 27 functioning ovarian tumors have been seen at the Rhode Island Hospital. There were 12 granulosa cell tumors and 11 thecomas. Either group tends to show a mixture of both types of estrogen-producing cells, and is classified according to the predominant cell type. These tumors are rarely of pure cell type. There were also two arrhenoblastomas and two dysgerminomas. It is recognized that dysgerminomas are not functioning tumors, but their over-all behavior warrants their consideration in this group. Figure 1 shows the reported incidence of malignancy in the literature, compared to that at the Rhode Island Hospital.

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TYPES OF TUMOR

TYPE	NO.	MALIGNANCY Reported	MALIGNANCY R.I.H.
ARRHENOBLASTOMA	2	12-25%	100%
DYSGERMINOMA	2	25-50%	100%
GRANULOSA CELL CA.	12	28-35%	58%
THECOMA	11	0%	0%
	27		41%

IF THECOMA IS OMITTED MALIGNANCY RATE 68%

DEGREE OF MALIGNANCY VARIES WITH PATH. GRADING

FIGURE 1

These tumors apparently can occur in any age group, particularly the granulosa cell and theca cell tumors. Both of our dysgerminomas were found before the age of 20, while the arrhenoblastoma patients were 41 and 20 years of age at the time of clinical recognition (Figure 2).

Eighteen of these 27 patients were married, and six, or 33 per cent, of these were childless, about twice the national average, and about the reported incidence of infertility in ovarian carcinoma in general. The age of menstrual onset was 11 to 14 years in all except the nine-year-old child. It is of interest that very recent follow-up revealed that this child noted her first menstrual period at 10½ years (Figure 3).

Most gynecological admissions for whatever cause would be concerned historically with bleeding, or the lack of it, abdominal pain, or abdominal swelling, so that the analysis of these symptoms is not particularly enlightening. Acne and hirsutism, however, which are unusual, were prominent symptoms in our 20-year-old arrhenoblastoma patient. Most women can accept with grace a little de-feminization, but at the subsequent appearance of masculinization they seek medical help (Figure 4).

Four of these patients had had previous curettage and radium, one of them three times, before the cause was found to be a functioning ovarian tumor. Our one fatal case of arrhenoblastoma was operated on two years previously for a ruptured tubal pregnancy, and her ovaries were reported as normal at that time.

AGE	
SPAN	9 - 84 yrs.
AVERAGE	46.3 yrs.
BEFORE AGE 35	8 - 30%
BEYOND AGE 35	19 - 70%

FIGURE 2

MARITAL STATUS AND PARITY	
Total cases	27
Married	18
Parous	12
Childless	6 or 33%
Onset of Menses	11 - 14 yrs. in all

Fig. 3

SYMPTOMS	
Vaginal bleeding	13
Abdominal pain	6
Abdominal swelling	5
Amenorrhea	5
* Hirsutism	1
* Acne	1
Infertility	1
Constipation	1

* Both occurred in arrhenoblastoma as presenting complaint.

Fig. 4

The only significant laboratory findings were elevated 17-ketosteroids in the arrhenoblastomas, anemia in those partients who bled too much, and distortion of the barium enema and intravenous pyelogram in many patients with large pelvic tumors.

Just as the symptomatology of these patients seemed to parallel other gynecological admissions, so were the pelvic findings in all cases strikingly similar; the main finding suggesting surgery was a pelvic mass. Twenty-two of 27 patients presented with a pelvic mass. The remaining five had normal pelvic findings. The first was operated on for infertility, and a bilateral wedge resection was done. She was found to have a thecoma, and she did well postoperatively. She now has two children, both adopted. The second patient had had three previous curettages, two with radium implantation, and had breakthrough bleeding each time. Finally at age 69 a total hysterectomy and bilateral salpingo-oophorectomy were done. She had a granulosa cell carcinoma of the ovary, and was living and well three years after surgery. The third patient was 21 years of age, and her primary complaint was amenorrhea. She could be made to bleed periodically with cyclic hormone replacement. Following an arrest she again became regular after low dosage irradiation of her ovaries. She was suspected of presenting a Stein-Leventhal syndrome; a left oophorectomy was done in conjunction with a resection of the right ovary. She was found to have a benign granulosa cell tumor, and has done well since, with regularly established menstrual periods.

The fourth patient presented with post-menopausal bleeding at the age of 55. A biopsy revealed endometrial carcinoma, and the pathology report following definitive surgery showed endometrial carcinoma and a thecoma of the left ovary. The coexistence of these two lesions is well known to all. The reported incidence, however, of carcinoma of the endometrium complicating these tumors is 10 to 20 per cent greater in thecomas than in granulosa cell tumors. In our 12 cases of granulosa cell tumor there was one case of endometrial carcinoma, an incidence of 8.3 per cent. This patient was 64 years of age and was found to have a benign granulosa cell tumor of the ovary, as well as endometrial carcinoma and adenocarcinoma of the opposite ovary. The pathologist considered this to be a benign granulosa cell tumor of the ovary, with secondary stimulation of the endometrium, resulting in endometrial carcinoma, which subsequently metastasized to the opposite ovary. There was, as previously mentioned, one case of endometrial carcinoma in the 11 theca cell tumors, an incidence of 9.1 per cent. The fifth patient with negative physical findings had post-menopausal bleeding at the age of 67. The curettings showed a high follicular endometrium; and Doctor Arthur Hertig, who reviewed the slides, suggested the possibility of a functioning ovarian tumor. At the time of definitive surgery she was found to have a thecoma of the ovary.

Of the 23 patients presenting granulosa cell tumors and thecomas, 18, or 80 per cent, showed endometrial hormone effect; and as previously mentioned, two had endometrial carcinoma.

I have previously mentioned the high incidence of malignancy in these tumors; that is, in all except the thecomas. The literature and our personal experience, however, teach us that these are tumors of low malignancy. If this is true, and if recurrences are solitary and easily removed, and if as is said they are as a group highly sensitive to radiation, can we then not modify our concepts of surgery of malignant tumors in these cases? In other words, can we recommend radical surgery after age 35, and conservative surgery before? Can we recommend a little operation for a little cancer, and a big operation for a big cancer?

I think perhaps we can if certain criteria are met: 1. Cul-de-sac aspiration smears should be obtained in all cases of ovarian tumors. 2. Any operation which requires the removal of one ovary should similarly require resection of the other. 3. Any operation which involves ovarian removal or resection, and which preserves the uterus should be attended by a dilatation and curettage.

Figure 5 shows the type of surgery done as related to the patient's age. Only one radical procedure was performed before the age of 35, and

concluded on next page

TYPE OF SURGERY
ACCORDING TO PATIENT'S AGE

Age		Conservative	Radical	Survival
To age 35	(4)	8	1	9-100%
Beyond age 35	(7)	2	16	13- 27.7%

Numbers in parentheses represent positive malignancy.

Fig. 5

all in this age group have survived. Two were dysgerminomas, and one of these had two recurrences treated successfully with radiation. Both have subsequently borne children. The one radical operation was performed for a bilateral arrhenoblastoma. The original operation was a left salpingo-oophorectomy and a resection of the right ovary, which at operation appeared to be perfectly normal. Tumor cells were found in the resected ovarian segment; a hysterectomy and removal of the residual ovary were carried out one week later. This clearly indicates the benefit of ovarian resection. These tumors are usually unilateral, but in 5 to 15 per cent of cases they are bilateral. Survival to date in this group is 100 per cent, and four of the eight patients who had conservative operations have subsequently borne children.

The remaining 18 cases occurred beyond the age of 35; two were managed conservatively, and 16 by radical procedures. Five of these patients were inoperable when first explored, and these cases represent our only fatalities. There were four granulosa cell tumors, and one arrhenoblastoma in this inoperable group.

TYPE OF SURGERY

TUMOR		CONSERVATIVE Benign	CONSERVATIVE Malignant	RADICAL Benign	RADICAL Malignant	SURVIVAL
Arrhenoblastoma	2				2	1- 50%
Dysgerminoma	2		2			2-100%
Granulosa Cell Ca.	12	3	1	2	6*	8- 67%
Thecoma	11	4		7*		11-100%
TOTAL	27	10		17		22- 81%

*Carcinoma of endometrium (one case in each group).

Fig. 6

Figure 6 illustrates the type of surgery performed in all groups, and the comparative survival rates. As might be expected we report a 100 per cent survival rate in the thecoma group. Four of the five deaths occurred in the granulosa cell carcinomas, a survival rate of 67 per cent. One arrhenoblastoma patient died, and I am of the opinion that the other represents a permanent cure. We also report 100 per cent survival in the dysgerminoma group, although one patient has already had two recurrences, which have responded to radiation.

Over-all the survival rate is 81 per cent, and all deaths occurred in patients treated beyond the age of 35. No case managed conservatively has died.

Conclusions

1. Twenty-seven cases of functional ovarian tumors seen at the Rhode Island Hospital from 1943 to 1958 have been reviewed.

2. There should be continued vigilance in recognizing these tumors. We suggest that all cases be reported to some large central tumor registry, so that more can be learned as larger series are surveyed.

3. A plea is made for conservative surgical treatment in the younger age group.

4. An over-all survival rate of 81 per cent is presented, and 100 per cent survival in the age group under 35 years.

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Sesquicentennial Celebration Dates

SCIENTIFIC MEETING

May 8 and 9, 1962

Marvel Gymnasium, Brown University

MEDICAL RESEARCH IN ISRAEL

Physical Work and Myocardial Infarction

The members of a communal settlement in Israel all have the same standard of living, whatever work they do; thus, clerks, agricultural workers, teachers and drivers live under the same environmental conditions. This gives an excellent opportunity for evaluating the effect of physical work as a factor in the etiology of coronary disease.

Doctor D. Brunner and Doctor G. Manelis, of Donolo Hospital, Jaffa, have recently published in the LANCET a ten-year survey of 8,500 people living in communal settlements, who were between 35 and 50 years of age in 1949. During the period, there were 111 proved cases of myocardial infarction, including 34 fatal cases. For non-sedentary male workers, the annual incidence of myocardial infarction was 1.36 per thousand, whilst the rate for sedentary workers was 4.1 per thousand. Thus the rate for sedentary workers was three times that for non-sedentary workers; the mortality rate was also three times greater in the former group.

Although Jews are reputed to be especially prone to coronary disease, the authors note that the rate which was found in sedentary workers in Israel communal settlements is almost identical with that reported for sedentary workers in London. The findings underline the importance of physical exercise as a factor in the prevention of myocardial infarction.

The Effect of a New Environment on Oriental Jews

The Yemenite Jews are of special interest in medical research. They form a homogeneous group who have their own way of life and who have had little inter-marriage with other groups. Although the immigration of Jews from Yemen started many years ago, the majority of the community came here very soon after the foundation of the State of Israel.

Doctor A. M. Cohen of Hadassah University Hospital, Jerusalem, writing in HAREFUAH, has investigated the incidence of diabetes mellitus in Yemenite Jews. It was found that among those who had immigrated within the last ten years, the incidence of diabetes was only 0.06%, whilst in old settlers (who were either born here or had been here for over 25 years) the incidence was 2.9%. In a similar comparison of the Kurdish Jewish community, no cases of diabetes were found among 988 recent arrivals, but in 598 "veterans" the incidence was 2%.

In an article recently published in the LANCET, Doctor Cohen, together with Doctor E. Neumann and Professor I. C. Michaelson, have investigated the incidence of hypertension and of retinal involutionary sclerotic changes among Yemenites over the age of 30. In 147 recent arrivals, there were only 4 cases of hypertension, whilst among 125 "veterans," there were 17 cases. Involutionary sclerotic changes in the retina (unassociated with diabetes or hypertension) was also considerably commoner in the old settled group than in the recent arrivals.

There are great differences between conditions of life in Israel and Yemen, and there is little doubt that the increased prevalence of diabetes, hypertension and sclerotic changes in the retina among the long settled Yemenites are a result of new conditions of life prevailing in Israel. It is probable that new dietary habits and the increased pace of the Western style of living are the factors responsible.

... Excerpts from Quarterly Review of the M. H. H. (Non-Resident Fellowship of the Israel Medical Association), Vol. 1, No. 1, Jan.-March, 1961, Jerusalem.

Editorials

WELFARE AND SECURITY

IN THE MIDST of the welter of public statements and reports on the problems of welfare costs and social security benefits for all, we are encouraged by the recent stand of Rhode Island's senior Congressman, Honorable John E. Fogarty, that government undertake a "thorough searching study" of the increasing federal welfare costs in the face of recent public uprising.

The uprising possibly refers to the controversy in New York state when the city of Newburgh cracked down on relief beneficiaries, setting forth proposed reforms that no one except the blind, aged and disabled may receive relief more than three months in any one year, that unmarried mothers are barred from relief if they have more illegitimate children, and that able-bodied men on relief must work 40 hours a week for the city.

The uproar that followed Newburgh's stand won nationwide attention, and drastic action by the New York State Welfare Board which forced the city fathers of Newburgh to drop their proposed program to correct what they considered flagrant welfare abuses, on the grounds that the action by the city was illegal under both state and federal law.

Mr. Fogarty may well ask that the Congress take a long hard look at the problem, for it was the Congress that made federal aid to dependent children funds available to families of unemployed men last May, and it was Congress that barred payment of federal relief money to men on relief *who do any work for their communities.* Thus New York halted virtually all work-relief programs in fear of losing some 16 million dollars in U.S. Welfare payments! Little wonder then that the state had to tell Newburgh to drop its proposed new relief policies because the federal government insists on uniform relief programs in all states that want to qualify for federal matching funds.

In the thorough searching study Mr. Fogarty proposes, he is reported as suggesting, among other matters, that such a review look into such matters as "the best distribution of financial responsibility between federal, state and local governments; eligibility standards for welfare recipients; residence and property-income limitations; . . ." We heartily concur, and we hope that the study may be by persons impartial enough to point out how the federal government is dictating how relief shall be administered at local levels.

In the news story of Mr. Fogarty's letter to Abraham Ribicoff, secretary of Health, Education and Welfare, the Congressman was reported as dissatisfied with explanations so far advanced for constantly climbing welfare expenditures in the face of a twentyfold expansion of the Old Age and Survivors program during the same period. Most people, he is reported as saying, expected the latter development to mean a gradual reduction in other welfare costs.

The "thorough searching study" that Mr. Fogarty advocates might well embrace an exhaustive review of the social security system. By political action the benefits are sweetened at least every election year on the premise that such additions cost very little. The ever increasing deficiencies postponed to some distant date, and the obvious inequities that materialize, are never publicized.

Thus, in the Congressional session just ended, a total of 10.7 billion dollars has been added to the fiscal burden of the government in the first seven months of this year, and 6.2 billion dollars of the increase is made up of sums added for welfare spending, education, housing, public works, the Peace Corps, the general administration of the government and all the rest, and 4.5 billion dollars is attributed to defense costs.

The control over the appropriation of money is one of the most important of the constitutional powers of Congress. Mr. Fogarty, as chairman of the House appropriations subcommittee handling money allocations for health, education and welfare is certainly in a key position to influence the Congress to take the long, searching look at federal welfare expenditures that he advocates. We hope he will press his point when the Congress reassembles next month, and that the study will also include a clear-cut analysis of the true cost of social security coverages, and the impact of these programs on private initiative which made this country the great nation it is.

RHODE ISLAND MEDICAL JOURNAL
December, 1961 — Vol. XLIV, No. 12

WHAT IS IT ALL ABOUT?

We have not previously commented upon the recent politically motivated efforts by labor officials and certain politicians to discredit the Medical Profession in Rhode Island and more specifically the Rhode Island Medical Society Physicians' Service. We have an overpowering suspicion that this great activity is merely a local manifestation of the nationwide campaign of organized labor to harass the Medical Profession. The strategy of divide and conquer is much in evidence on the local scene. Segments of labor abetted by self-seeking politicians will not rest until they have attained control of the practice of medicine with a view to accomplishing cradle-to-grave medical care financed by employers or the government. This objective cannot be attained without serious impairment of the quality of medical care and discouragement of the consistent and conscientious pursuit of excellence characteristic of American Medicine in 1961. One of our respected medical elder statesmen in Rhode Island has wondered at this great injustice perpetrated by our violent critics at a time when the quality of patient care, degree of physician training, intensity of self-examination and self-policing, and the standards of medical ethics are the highest in the history of medicine. It is not sufficiently well understood by the public that the erosive effect of attacks such as we have been exposed to constitute one of the important influences causing the recent substantial drop in the quality of students willing to enter the long and rigid training and discipline required for a career in medicine (43 per cent "A" students entering medical school in 1950 as compared to 15 per cent in 1960). We have no doubt that the present attacks on Physicians' Service are designed either to bring about its control by political and labor groups or, failing this, its destruction.

We shall confine our further remarks to two matters, the "180 cases" of "abuses" which have preoccupied the daily press, and the recommendation of Governor John A. Notte that the Physicians' Service Charter be amended by the General Assembly to provide "public" control of its Board of Directors.

In the first matter we can say only that until the cases are properly documented and objectively and intelligently studied they constitute little more than innuendo and hearsay. Published on the next page is the formal proposal made on December 3, 1961, by the President of the Rhode Island Medical Society to study the so-called 180 cases by the Grievance Committee of this Society in the presence of impartial observers appointed by the Rhode Island Bar Association. The complainants have been offered the opportunity to be represented by counsel, either their own or that of their labor union. The offer to study these cases was made in sincere good faith and in accordance with the long-standing desire of the medical profession to police and discipline its own ranks. It ill behooves labor to reject this offer out of hand and casts serious doubt on their motives and sincereity. We resent such disparagements as "whitewash" and "kangaroo court." Other methods of investigation and discipline are provided by law if they are preferred. There is, however, absolutely no justification for playing politics by the discredited methods of partial disclosures, inadequate investigation, legislative sideshows, and innuendo. The offer previously made still stands. To quote our own daily press, which has not always been sympathetic to the profession, let the mouth-pieces of labor either "put up or shut up."

The other matter that must be faced realistically is the proposal to remove the control of Physicians' Service from the medical profession. The heart of this plan lies in the service benefit provisions for under-income subscribers according to the several contracts. This public service is provided by participating physicians under contract on a voluntary basis. It is our emphatic conviction that service benefits and public control are absolutely incompatible. We are willing to predict that a radical change in the government of the plan will result in resignations of participating physicians sufficient to make it inoperative in its present form. This is a considerable onus for our legislators to assume. A plan as advantageous to the public as our Physicians' Service would be difficult to replace. But if they elect to wreck the plan in this irresponsible way, we want to be on record as having warned them.

THE RHODE ISLAND MEDICAL SOCIETY

106 Francis Street, Providence 3, Rhode Island

December 3, 1961

Mr. Thomas Policastro
President
AFL-CIO of Rhode Island
356 Westminster Street
Providence, Rhode Island

Dear Mr. Policastro:

The Rhode Island Medical Society is extremely shocked at the accusations your association is making against some of our members of alleged abuses of the Physicians' Service Plan. It is shocking because these physicians are judged guilty by you before they are given the opportunity to be heard and before any evidence is submitted. It is also unfair under the American tradition that a person is innocent until proven guilty beyond reasonable doubt. So far we have only allegations, insinuations and innuendo by your spokesman, but no incontrovertible evidence of guilt.

The Rhode Island Medical Society concerns itself not only with the professional competency of its members but also with their ethical conduct. We have a strict code of ethics that every member must accept. We have a proper committee — the Grievance Committee — which has been set up to consider any deviations or violations of our code of ethics. This committee seeks not only to insure that the people of our State receive good medical care, but also that they shall be protected from any unscrupulous act on the part of any doctor. They act on any complaint properly presented to them from any source whatsoever. When a doctor has been found at fault, such fault has been corrected and punitive action has been resorted to when deemed necessary.

To eliminate any doubt of a fair hearing the Grievance Committee will invite the complainant to attend the meeting at which his complaint will be heard and, if he so desires, he may bring his own or the Union's attorney so long as such attorney is licensed to practice in this state. Further, the Grievance Committee is prepared to ask the President of the Rhode Island Bar Association to appoint disinterested attorneys, selected from past presidents or current officers, to attend the hearings as representatives of the public; such person would be permitted to examine the complainant or doctor concerned and while having no vote he could make, if desired, a separate report to the public on any case submitted. Because of the number of alleged cases. I would consider it fair to ask only one of these public representatives to attend each hearing.

In the interest of fairness to the public and to the physicians involved, we ask that you submit immediately in writing your factual data on all cases. This will permit the Committee to divide the complaints into definite categories and so to expedite the investigation. I will instruct the Committee to hold, so far as possible, at least one evening meeting a week. Each alleged abuse will be investigated in detail, and appropriate action will be taken by the Society against any of its members found guilty of violating their trust. Periodic reports will be made to the public by the Society.

In the light of the damaging allegations that have been made by your spokesman, your failure to cooperate with the Rhode Island Medical Society can only be construed to be evidence that the facts do not sustain the claims.

Very truly yours,

(signed) SAMUEL ADELSON, M.D.
President

III. HYPOCRISY IN THE DAILY PRESS

IN *The Evening Bulletin* (Providence) of November 9, 1961, this bold heading appears on the editorial page: "R. I.'s Medical Profession has a Disciplinary Problem."

A few pages farther on in the same section appears the following advertisement: "Don't Let Sluggish Kidneys cause BACKACHE. Why suffer from backache, loss of energy or body pains often caused by Simple Kidney Slowdown? Try ——'s Pills for analgesic relief of pain. ——'s Pills also give stimulating diuretic action to help increase Kidney output and reduce minor bladder irritations. For palliative relief of symptomatic troubles caused by Sluggish Kidneys . . . Try ——'s Pills."

WHAT IS OVER-UTILIZATION?

INCREASING COSTS for Blue Cross and Physicians Service have recently resulted in wholesale recriminations against these plans.

Among the allegations is the unproved claim that doctors over-utilize hospitals for their own convenience. What patients should be in the hospital and how long they should stay are elusive problems that no one is better able to decide than the individual physician. Nowhere is the abuse of over-utilization better demonstrated than in veterans' hospitals. Rhode Island general hospitals now quite universally have created utilization committees to police themselves. Unfortunately efforts to reduce costs by controlling this form of utilization cannot be considered the answer.

The basic problem of costs turns on a more significant fact. Every occupied hospital bed in Rhode Island is a primary cost to Blue Cross and Physicians Service when occupied by a subscriber. Increase the number of beds and costs increase; decrease the number of beds and costs decrease. But a single hospital bed, whether occupied by one person for fifty days or five persons for ten days each, represents a relatively constant cost. In fact, an argument can be made to show that longer periods of hospitalization are cheaper because high initial admission expenses are reduced in frequency.

The essence of the problem is that Blue Cross and Physicians Service gain by keeping people out of hospitals, and hospitals gain by full occupancy. The doctor is the victim in the middle, struggling to reduce utilization forced on him by the pressure of illness of his patients and his own medical success. A curious, rarely emphasized aspect of Blue Cross and Physicians Service is the

concluded on next page

fact that premiums are collected, but no guarantee exists that any collection of benefits will ever be possible, except that a hospital bed happens to be vacant. The hospitals of Rhode Island by steady increases in number of beds are busy making sure that beds are available, and this will continue to skyrocket costs — utilization committees notwithstanding.

PHYSICAL FITNESS AND THE ARMED FORCES

SOME WEEKS AGO we noted the following news item datelined Washington, D. C., in a Dublin newspaper: "Unfit Americans Worry Forces. Since October, 1948, United States medical examination centers have rejected more than a million men as physically unfit for military service as volunteers or national servicemen. In the past year they have been turning away more than 1,000 a month who would have passed if they had kept themselves in good physical shape. President Kennedy has urged schools to pay more attention to cultivating physical fitness."

We would not choose to take issue with our youthful President, himself a devotee of the rigors of touch football and the rocking chair, over the virtues of physical fitness. Certainly no high school or college student was ever harmed by required setting-up exercises (à la Bonnie Pruden), or modern dance, or even organized sports. Perhaps some may even be benefited by these largely time-wasting pursuits. But the implication that this type of activity has even the remotest relationship with the rate of medical rejections by the armed forces is pure nonsense.

There have been, of course, rejections for such classical reasons as mitral stenosis, chronic nephritis, and active tuberculosis. Any grizzled veteran among us knows, however, that the great bulk of rejections are for such disorders as flat feet, sinusitis, hay fever, varicose veins, hemorrhoids, hernia, perforated ear drum, 20/200 vision, epilepsy, mental retardation, idiocy, and even such exotic complaints as bed wetting, and preferring the company of boys to that of girls.

It is well-known, of course, that many superb athletes have terrible feet and can barely walk off the playing field. In fact a famous home-run hitter of recent decades wore space shoes because his feet caused him so much misery. During World War II the major league baseball teams were largely manned by military rejects.

All of which we submit has absolutely nothing to do with "physical fitness."

DISTRICT MEDICAL SOCIETY MEETINGS

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, October 9, 1961. The meeting was called to order by Doctor J. Merrill Gibson, vice president, who presided in the absence of Doctor Fratantuono.

The minutes of the April meeting, published in the RHODE ISLAND MEDICAL JOURNAL, were approved as published.

Report of the Secretary

Doctor William A. Reid, secretary, reported for the Executive Committee as follows:

Since the April meeting the Executive Committee has met to review applications for membership and to consider other matters of business for the Association.

The Committee has approved of the transfer of membership from active to associate for Doctors Joseph Tarantino and Tseh-Han Chen, both of whom are to be active members in the Kent County Medical Society. It also approved of the transfer to active membership in the Providence Medical Association of Doctor Louis M. Sod, formerly a member of the Pawtucket Medical Association.

The Committee reviewed the action of the president in soliciting members to staff polio clinics in June and July, and it approved of the nomination of Doctors Edward J. West, Jeremiah A. Dailey and Joseph H. Dwinelle as the Association's representatives on the Medical Advisory Committee of Providence County for the National Foundation.

The Committee approved of the formation of a Providence Association of Medical Assistants along the lines proposed in a constitution and by-laws submitted to the executive committee, and it named Doctors Frank Fratantuono, J. Merrill Gibson, and Robert V. Lewis to serve on the Advisory Committee to the new organization for the coming year.

Announcements by the Vice President

Doctor Gibson reported that since the April meeting the Association had recorded the death of two members, Doctor Frank T. Fulton, who was President of the Association in 1921, and Doctor Morris Botvin. A moment of prayer was conducted in memory of these members.

Doctor Gibson notified the members of various medical meetings to be held within the Greater Providence area within the month, and he urged support of the meetings by the members of the Association.

Election of Members

The secretary reported that the Executive Committee had approved of the nominations of the following physicians as active members of the Association: Harold L. Beddoe, M.D.; Tse-Ping Chen, M.D.; Robert L. Curran, M.D.; Stephan I. Frater, M.D.; Irving T. Gilson, M.D.; Tadeusz A. Gotlib, M.D.; William A. Marshall, M.D.; Baruh B. Motola, M.D.; Manuel Saborio, M.D.; Robert P. Sarni, M.D.; and Zygmunt W. Skomoroch, M.D.

A motion was made, seconded and passed that the members nominated for active membership be elected.

Scientific Program

Doctor Gibson introduced Mr. Myron Macht, of New York City, the head of the field department of the Automotive Crash Injury Research of Cornell University, who discussed the work of his group and its role in the reduction of highway death and accident injury toll.

A motion picture in sound was shown in which the importance of safety devices in automobiles, particularly seat belts, was demonstrated.

There was discussion of the subject by the members and guests present.

A motion was made by Doctor Irving Beck, as follows:

"*WHEREAS* injury and death due to automobile accidents have reached the staggering figures of 4,000,000 and 38,000 per year respectively, and —

"*WHEREAS* these accidents form the major portion of the leading cause of death — trauma — in our youth, and —

"*WHEREAS* it has been conclusively shown that car design may be easily improved to minimize the severity of such accidents by effectively restraining anti-ejection apparatus (viz., seat belts with factory built-in front and rear

anchorages); doors that will not open on impact; seats and cushions that will not become displaced on impact; energy-absorbing interiors; recessed instrument panels; and other devices recommended by medical and safety authorities; and

"*WHEREAS* the contention of executives of the auto industry has been that there is insufficient public demand for these improvements, and they, therefore, are not sales inducements; and they have been quoted as ignoring or rejecting the advice of those concerned with auto safety, and

"*WHEREAS* it is the responsibility of the medical profession in general to initiate measures to improve the public health,

"*THEREFORE BE IT RESOLVED* that this association be on record as approving the principle that the incorporation of safety devices as listed previously is a prime responsibility of the automobile manufacturer; that this should be done voluntarily in the public interest, and that if the industry continues to put style and speed above safety that legislation to this effect will be necessary, and

"*BE IT FURTHER RESOLVED* that a copy of this resolution be sent to the appropriate executive of each of the major automobile manufacturers, and to each of their local sales agencies."

The motion was accepted in principle with referral to the Executive Committee of the Association for implementation.

Adjournment

The meeting adjourned at 10:15 P.M.
Collation was served.
Attendance was 94.

Respectfully submitted,
WILLIAM A. REID, M.D., *Secretary*

NEWPORT COUNTY MEDICAL SOCIETY

A Joint Meeting of the Newport County Medical Society and the Naval Medical Officers of the Naval Hospital, Newport, R. I., took place at 8:15 P.M., September 20, 1961, at the Officers Club, U. S. Naval Base, with Capt. Joseph L. Yon, Commanding Officer of the Naval Hospital, presiding.

To terminate the two years of close, harmonious professional relationship between these two medical groups, Capt. Yon was instrumental in obtaining the consent of the Admiral and Naval War College Staff for a demonstration of the Naval Electronic Warfare Simulator to the entire medical staff of the Newport Hospital.

This demonstration, under the aegis of Capt. Chandler Swanson and his entire personnel, showed once again the goodwill of the Navy, in giving unstintingly of their time to create a close relationship with civilian medicine.

The evening was appreciated as most instructive and fascinating by the entire Newport Hospital staff.

The demonstration was followed by cocktails and dinner at the Officers Club.

The meeting adjourned at 10:30 P.M.

JOSÉ M. RAMOS, M.D., *President*

NEWPORT COUNTY MEDICAL SOCIETY

The Naval Medical Officers of the Newport Naval Hospital and the Newport County Medical Society and their wives held a joint meeting at the Hotel Viking on Wednesday, November 8. Seated at the head table were Rear Admiral Charles Buchanan, Captain Joseph Yon, USN, MC, Commanding Officer, Newport Naval Hospital, Captain Jesse Suder, USN, MC, Executive Officer, Newport Naval Hospital, Captain Ernest H. Joy, Senior Medical Officer, Atlantic Fleet Destroyers and Donald Fletcher, M.D., Vice President of the Newport County Medical Society and Samuel Adelson, M.D., President of the Rhode Island Medical Society. Following the dinner, Cdr. Raoul Lopez of the Chilean Navy gave a talk on the historical and political development of Chile.

RICHARD R. KNOWLES, M.D., *Secretary*

THROUGH . . .  *the Microscope*

American Museum of Health Planned for World's Fair

An American Museum of Health has been granted a charter, as an educational institution, by the Board of Regents of the University of the State of New York, according to Doctor Robert L. Levy, chairman of the Board of Trustees of the new corporation. A national advisory group of distinguished leaders in medicine, public health and related fields, is now being formed to assist in the development of a program for the Museum.

The newly-created institution will erect a $3,500,000 Hall of Medicine and Public Health at the World's Fair 1964-1965 in New York City. Robert Moses, president of the Fair Corporation, said the Fair looks forward to an outstanding exhibit supported by local and national health and related organizations.

In view of the national significance of the Museum and in recognition of the public interest that will be served by a medical and health pavilion, Fair officials have agreed that 70,000 square feet of space will be made available in the special exhibits area of the Fair.

This pavilion, which will be the principal agency for medical and health exhibits at the Fair, will be developed with the view of establishing a permanent Health Museum in New York City prior to the termination of the Fair, Doctor Levy said.

Five Rhode Islanders Inducted by College of Surgeons

Approximately 1,103 surgeons were inducted in Chicago last month as new Fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual five-day Clinical Congress of the world's largest organization of surgeons. The A.C.S., founded in 1913 to establish standards of competency and character for specialists in surgery, has grown in 48 years' time from a founding group of 450 to a total membership of approximately 24,500 in 71 countries.

Fellowship, entitling the recipient to the designation, "F.A.C.S.," following his name, is awarded to doctors who fulfill comprehensive requirements for acceptable medical education and advanced training as specialists in one or another of the branches of surgery, and who give evidence of good moral character and ethical practice.

Doctors receiving this distinction from Rhode Island at the 1961 convocation were as follows: *Pawtucket,* Stephen J. Hoye; *Providence,* Thomas F. Head, Rudolph W. Pearson, Mendell Robinson; and *Westerly,* James F. Martin.

McNeil Withdraws "Flexin" Products from Market

McNeil Laboratories, Inc., is withdrawing from the market FLEXIN® zoxazolamine and all FLEXIN-containing products, it was announced today by Robert L. McNeil, Jr., chairman.

This action, which also covers FLEXILON,® FLEXILON-HC,® and TRIURATE,® is being taken because certain clinical reports and observations submitted to the company by physicians suggest that FLEXIN may be associated with the development of hepatitis in an occasional hypersensitive patient.

In a letter mailed to physicians, Doctor James M. Shaffer, medical director of McNeil Laboratories, stated:

"The incidence of hepatitis associated with the use of FLEXIN and FLEXIN-containing products is low, but because it is extremely difficult to determine whether the hepatitis associated with the use of these drugs is of viral origin or drug-induced, it is considered in the best interests of all concerned to recommend that you discontinue the use of these drugs. If you have any samples of FLEXIN or the other drugs listed above, we request that they be destroyed."

British Study Shows Overweight Hazard

A pilot study on the death rates among persons with physical impairments, made by a large British

life insurance company and covering 11½ years of policyholder experience, corroborates the recent U.S. study of the Society of Actuaries which reported a much higher death rate among overweight persons.

The British study shows that the death rate among persons weighing 40 per cent or more above standard at time of policy purchase, was nearly twice the standard death rate. For persons underweight, the death rate was less than standard and for the weights between, the experience was very close to standard.

The British companies are giving consideration to making an inter-company study of impaired risks.

Comments from the Distaff Side

Women disapprove of specialists but love their pediatricians, delegates to McCall's Congress on Better Living meeting at Chicago stated.

The delegates felt their doctors are overworked. Said one woman, "He's so busy, I just don't feel I can sit down and talk with him." And another said, "I feel guilty asking him to come to the house when someone is sick." But the delegates definitely believed there are too many specialists. One said, "I have to make a complete diagnosis myself before I know which specialist to call." Several women complained their general practitioners too often send them to specialists. Said one, "I sometimes feel the G.P. is just a switchboard."

The women are not too fond of clinics. While they believe the doctors are competent, there is a definite feeling that clinics are too cold and impersonal. Said one delegate, "I'm just a number on a card." Many of the women said the clinic fees are too high and the waiting line is too long. A few delegates, however, said a clinic has several doctors available for consultation and is good "when you're new in town."

The women complained about the high costs of drugs, doctors' fees and hospital bills. But they all agreed when one woman said, "I'd pay a thousand times more if it will save a member of my family."

TB Drug Found 80 Per Cent Effective in USPHS Field Trial

Isoniazid, a drug widely used to treat tuberculosis, was 80 per cent effective in preventing the disease among more than 12,000 household contacts of newly discovered cases of tuberculosis, Doctor Luther L. Terry, surgeon general of the Public Health Service, announced recently.

During the year after a new case was discovered, daily doses of isoniazid taken under medical supervision offered marked protection to household contacts during a period when they were at high risk of developing the disease themselves. Whether this protection lasts is not known at this time, the Public Health Service said.

The announcement was based on the preliminary results of one of three field trials begun four years ago and involving 54,000 people in special risk groups. During the year after the source case was discovered, the tuberculosis rate for half of the household contacts, who took daily doses of isoniazid, was 0.2 per 1,000 in contrast to a rate of 6 per 1,000 among the half who were given placebos.

Kids, Health Outlays Grow Together

Although young people constitute a healthy segment of the population, they account for heavy medical and dental bills, according to the Health Insurance Institute.

Direct health expenditures for children up to age 5 go mostly for physicians' services, hospital care and medicines. Illnesses and injuries of an acute type—including everything from chickenpox, measles, mumps and sore throats to appendicitis and broken legs—are the most common ailments of younger children.

By the time junior enters school, his medical expenses have begun to decline, but dentists' costs start to soar.

The U.S. National Health Survey showed the average grade school youngster visits a physician less than four times a year, compared with six to seven annual visits for the pre-kindergartner, but a much higher proportion of dental work stems from the school-age group.

Between kindergarten and high school, young people see their dentists twice a year, on the average. The total number of visits annually in the 5-14 age group is estimated at 62 million; prior to age 5 fewer than one child in three sees a dentist and the annual total of visits is only 6 million.

The principal dental work required by children includes teeth straightening, often a costly procedure, as well as fillings and extractions.

Frequency of dental visits continues high for teen-agers, who average even more than two sessions with the dentist per year.

Teen-agers also consult physicians more often than children in the sub-teen years. Emotional and skin problems are common reasons for the consultations.

Automobile and other accidents, enemy No. 1 of children of all ages, are particularly dangerous in the teen years and tend to increase the volume of needed medical care.

Precise health expenditures cannot be pinned on any specific age group, but the more than 70 million children and youth in the U.S. probably run up a total medical bill of about $4½ billion annually, the Institute said.

The health care and services required by individual children vary tremendously, it added, and the amount a family spends to meet the needs of its

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children depends on many factors, including sheer luck.

The Institute urged every family to take the guesswork out of health care costs by budgeting for the predictable expenditures and protecting itself with adequate health insurance to spread the risks of unexpected costs.

Autos Cited as Major Source of Air Pollution

Automobiles are a major source of air pollution, ranking first among nine leading sources cited in a special report on air pollution in the September issue of *Patterns of Disease*, a Parke, Davis & Company publication for the medical profession.

An analysis of air contaminants in Los Angeles County, as of January 1961, showed that automobiles released 965 tons per day of hydrocarbons, 250 tons of nitrogen oxides, 19 tons of sulfur dioxide, 6,850 tons of carbon monoxide, and 27 tons of aerosols. Ranking second as a source of air pollution are other modes of transportation, followed by the petroleum industry, combustion of fuels, use of organic solvents, metals, chemicals, incineration of refuse, and minerals.

The nation's cleanest air, according to *Patterns*, is to be found over deserts. "In general, air pollution seems to be more of a problem as the size of a community increases. In terms of the amount of suspended particulate matter in the air, urban air is about four times more polluted than the air in nonurban areas. Air over the dirtiest nonurban area is much cleaner than that over urban, or even suburban, regions. A significant difference has been found in and around an urban area in indoor as compared to outdoor air," *Patterns* reports.

"The level of organic air pollutants in urban areas in different regions of the nation is highest in the winter, followed by the levels in fall, spring, and summer in decreasing order. In the Gulf South, however, the levels in the winter and fall are almost identical," according to *Patterns*.

During fall months, the nation's highest level of organic air contaminants is in urban areas of the Pacific Coast. Second highest is in the urban areas of the Midwest, followed by Mid-Atlantic, Gulf South, Southeast, Mideast, New England, Rocky Mountain and Great Plains areas.

Merck Foundation Aids Residents and Interns

More than 100 resident physicians and interns in teaching hospitals received financial assistance from the George W. Merck Memorial Loan Fund in its second year of operation, it was announced recently by the Merck Company Foundation. Seventy per

cent of the loans went to residents, who generally have greater family responsibilities than interns and hence encounter more financial emergencies, the report said.

Nineteen medical schools participate in the Fund, established "to encourage deserving interns and residents to seek the best possible postgraduate training by providing loan funds that will supplement the stipends available to them at teaching hospitals."

The loans to residents and interns are granted by and repaid to each participating school on terms prescribed by its dean. The Merck Company Foundation has expressed the hope that "the terms established shall not be burdensome to the recipient of a loan." This Foundation, supported by Merck & Co., Inc., makes contributions to education and other worthy causes.

Unique Health Plan Sponsored

The first comprehensive medical care program in the United States under the joint auspices of a medical college-teaching hospital center and a labor-management fund was established in New York City in June, according to NEWS & NOTES of New York Medical College.

A five-year agreement, which will provide home, office and hospital medical care for employees of the hotel industry in New York City and their families, was signed by representatives of New York Medical College-Flower and Fifth Avenue hospitals, the New York Hotel Trades Council (AFL-CIO) and the Hotel Association of New York City in ceremonies in the auditorium of the college, Fifth Avenue at 106th Street.

The program will represent an initial annual outlay of $290,000 by the Union Family Medical Fund of the Hotel Industry of New York City, a joint labor-management body. The agreement is the first step in the establishment of a city-wide program which will eventually cover 80,000 persons—employees of the hotel industry in New York City and their dependents. The New York Medical College-Flower and Fifth Avenue Hospital center will cover 9,000 employees and dependents; the remainder will be covered by additional medical offices to be established throughout New York City.

Government Offers Grants for Community Health Services

Applications from public and nonprofit agencies for project grants authorized by the new Community Health Services and Facilities Act are now being accepted by the Public Health Service.

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The grants are for developing, demonstrating or studying new methods of providing health services, particularly for the chronically ill and aged.

Congress has appropriated approximately 3 million dollars to finance the new grant program this year.

Types of projects eligible for aid include: home nursing services for the chronically ill and aged, improvements in the care given to patients in nursing homes, and programs for making a variety of therapeutic and other services available to patients in their own homes. The project must not only be useful to the community that conducts it, but must also show promise of yielding knowledge that will help other communities to develop similar services.

Although grants can be made to cover the full cost of a project, preference will be given to those that will be partially financed by the applicants and to those that are likely to be continued after federal aid is withdrawn.

Public is Securing Broader Protection

Each year, the American public secures broader health insurance protection for itself against the hospital and medical expenses which result from illness or injury, the Health Insurance Institute said recently.

At the end of 1960, some 92 per cent of the 132 million persons who had hospital expense insurance also had protection against the costs of surgery, the Institute said. Ten years earlier, 71 per cent of those protected against hospital expenses also were insured against surgical costs.

Sixty-six per cent of those with hospital expense insurance at the end of 1960 also had regular medical expense insurance, which helps pay for doctor calls and other non-surgical care by doctors. In 1950, just 28 per cent of those with hospital expense protection had regular medical expense insurance, said the Institute.

Major medical expense insurance, which is designed to help absorb the heavy costs of serious illnesses, also is filling a need of the American people, the Institute said. Of the 132 million persons with hospital expense insurance, 21 per cent had major medical insurance. In 1951, only one tenth of one per cent of persons with hospital insurance had major medical coverage.

Insurance Companies Lead

Over the past decade, insurance companies have become the leading health insurers of the American people, said the Institute. The companies cover more people than any other voluntary insuring organizations in four out of the five categories of health insurance.

Insurance companies protect 55 per cent of the 132 million persons with hospital expense insurance; 57 per cent of the 121 million insured against surgical expense; the 27 million with major medical expense protection; and 75 per cent of the more than 42 million persons protected against loss of income through disability, the Institute said.

National Disability Average 16 Days Per Person Annually

During the year ending June 30, 1960, illness and injury caused the American people to stay home from work, stay in bed, or otherwise cut down their usual activities for an average of sixteen days per person, including six days of bed disability, the Public Health Service reported recently.

These estimates come from the latest in a series of published statistical reports of the Service's National Health Survey. They apply to the civilian population of the country exclusive of persons confined to long-term institutions.

The figures are similar to those reported for the year ending June 30, 1959. However, estimates for both these years are well under the figures for the year ending June 30, 1958, which covered the period of the Asian influenza epidemic. During that year the average was twenty days of restricted activity, including eight days of bed disability.

The new report also shows that during the year ending June 30, 1960, more disability was experienced by women than by men. People over 45 had more disability days than did younger persons, with the rate increasing sharply with advancing age.

People who live in rural farm areas of the country reported more days of disability, on the average, than those living in urban and rural-nonfarm areas. Those in the lowest income groups reported the highest rates of disability, and the number of disability days dropped consistently with rising income.

People who live in the South reported more disability days than persons in other sections of the country. The lowest number of restricted activity and bed disability days was reported by residents of the North Central States.

The data are derived from the National Health Survey's continuing nationwide household interviewing with a representative sample of the population, conducted for the Public Health Service by the U.S. Bureau of the Census. The information recorded about individuals is confidential and only statistical totals are published.

Football Fatalities Call for Equipment Review

The 25 fatalities from playing organized football this fall indicate the need for continuing research to improve the protective equipment for players, say most members of the American Medical Association's Committee on the Medical Aspects of Sports.

While the relatively large number of football fatalities at this stage of the season is shocking to the public and continuing reason for concern to

physicians and other persons, an important question is "to determine whether some or all of them may have been preventable," said Allen J. Ryan, M.D., Meriden, Conn., chairman of the committee. Dr. Ryan, former Yale track man, also is vice president of the American College of Sports Medicine.

There is no real statistical difference between the occurrence of 10, 30 or even 40 fatalities in one season, Dr. Ryan said. There are so few deaths in comparison to youths playing football that statistics are meaningless.

"The number of exposures (times that players participated in a practice or a game) must be in the tens or even hundreds of millions," he said.

Francis D. Murphey, M.D., Memphis, Tenn., said that the helmet research should cover improving protection against injuries of the neck as well as head injuries. Dr. Murphey also said that strict enforcement of the rule against use of face protectors by oponents as a lever might reduce the incidence of neck injuries. Dr. Murphey is a neurosurgeon with a special interest in head injuries.

T. B. Quigley, M.D., Boston, noted that the committee has been deeply involved with equipment, including helmets, and hopes to establish criteria and standards for maximum protection. Dr. Quigley is orthopedic consultant to the Harvard University football team.

Ford Workers Get Full Cost of Health Care

Ford workers and their families will now have the full cost of hospital, surgical and medical insurance (Blue Cross-Blue Shield) paid for them by the company.

High on the list of important economic gains negotiated by the UAW Ford bargaining team was company-paid health insurance.

Ford workers can now begin to take home in their paycheck their share of what used to be a 50-50 splitting of the cost of health insurance.

A completely new schedule of life insurance, sick and accident insurance — effective this month — provides across the board benefits that match anything ever won in union negotiations from a major company.

Ford will also pay half the cost of the monthly premiums for Blue Cross and Blue Shield protection for all Ford workers now retired and for those who retire in the future.

Should the U. S. Congress enact legislation providing hospital and medical assistance to retirees, Ford will nevertheless arrange for supplementary coverage and continue to pay for half the retirees' Blue Cross-Blue Shield monthly premium.

31 Million Covered by Major Medical

Major Medical Expense Insurance, which helps pay for virtually all types of medical services, is the fastest growing form of health insurance in the United States, the Health Insurance Institute reported recently.

Major Medical, sometimes called "catastrophe" insurance, got its start a decade ago and covered some 5.2 million persons by the end of 1955, or one out of every 33 persons among the civilian population.

As of June 30, 1961, however, Major Medical as written by insurance companies covered an estimated 31 million people, or one out of every six persons.

Major Medical, with benefits ranging as high as $20,000, helps pay for hospital and surgical care, and a wide variety of other medical services, including prescribed medicines and drugs, medical appliances and physicians' services, charges by a registered nurse at home or in hospital, ambulance or other necessary transportation, and dressings.

In short, benefits are provided for practically every kind of treatment needed for recovery — either in or out of hospital when authorized by a licensed physician.

Identifying Features

A typical Major Medical policy has two identifying features — the deductible and coinsurance. The deductible, similar to that used in automobile insurance, may range from $25 to $500, depending on the policy, and is the amount of initial medical expenses the insured must pay before his policy benefits begin. The Institute said the higher the deductible was set, the lower the premium would be.

Coinsurance, in which the policyholder shares part of the risk with the company, comes into effect after the deductible has been applied, with the company paying 75 or 80 per cent of the bills, and the insured paying 25 or 20 per cent, according to policy provision, said the Institute.

HEALTH CARE FOR THE AGED: KERR-MILLS AND HEW*

Extension of Remarks of Hon. Thomas B. Curtis of Missouri, in the House of Representatives, Wednesday, September 27, 1961

MR. SPEAKER, earlier in this session I placed in the CONGRESSIONAL RECORD, under the title "Kerr-Mills Success—Despite HEW"—CONGRESSIONAL RECORD, September 14, pages 18372-18373; corrections to bring material up to date and correct errors in printing, CONGRESSIONAL RECORD, September 19, page 19112—a summary of the State action for the assistance of the aged in the health care field under the Kerr-Mills Act which the Congress enacted in the 86th Congress. I also called attention to the fact that the Department of Health, Education, and Welfare has done little of a constructive nature to lead States to the enactment of the necessary enabling legislation to bring this form of assistance into effect in the States. Despite the attitude of the Department, great advances have been made under this farsighted law.

My placing this material in the CONGRESSIONAL RECORD brought a response from the Department of Health, Education, and Welfare through its Assistant Secretary, the Honorable Wilbur Cohen. I subsequently replied to Assistant Secretary Cohen hoping to clarify the issue on what HEW's role has been in the advancement of the Kerr-Mills Act. Because of the importance of this question of health care for the aged, I would like to place in the RECORD at this point the letter which I received from the Assistant Secretary of Health, Education, and Welfare and my reply to it.

MR. COHEN . . .

". . . this Department has extended great effort to bring the benefits of this legislation to its best development."

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE,
September 22, 1961.

HON. THOMAS B. CURTIS,
House of Representatives,
Washington, D.C.

DEAR MR. CURTIS: I read with great interest your remarks in the CONGRESSIONAL RECORD of September 14, 1961, concerning the administration by the Department of Health, Education, and Welfare of the programs of medical care for the aged under the 1960 amendments to title I of the Social Security Act.

I note in particular your assertion of the total absence of leadership by the Department of Health, Education, and Welfare to encourage their implementation by the States and a failure to mention the provision for increased Federal financial participation in medical care in behalf of recipients of old-age assistance. I feel seriously that you have been misinformed on both of these points. Quite to the contrary, this Department has extended great effort to bring the benefits of this legislation to its best development.

*Reprinted from the CONGRESSIONAL RECORD-APPENDIX, issue of October 13, 1961.

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MR. CURTIS . . .

". . . I wish the actions supported this assurance."

HOUSE OF REPRESENTATIVES,
Washington, D.C., October 10, 1961.

HON. WILBUR J. COHEN,
Assistant Secretary, Department of Health, Education, and Welfare, Washington, D.C.

DEAR MR. COHEN: Thank you for your letter of September 22, 1961, commenting upon my remarks accompanying the chart I had prepared to show the magnitude of the Kerr-Mills Act operation, which appeared in the CONGRESSIONAL RECORD of September 14, 1961. I appreciate your assurance that the Department of Health, Education, and Welfare strongly supports the 1960 Kerr-Mills Act to assist in providing adequate health care for our senior citizens. I wish the actions supported this assurance.

Granting the routine actions you say were taken by the Department of Health, Education, and Welfare, they fall short of providing leadership of the Department to encourage the States to implement the 1960 amendment. Furthermore, other actions and statements of Department officials were going in the other direction. It is true that the data for the chart came from departmental reports, yet the Department did not compile and publish this information in usable form. It required considerable effort to gather this material together to make the meaningful chart I put in the RECORD.

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Mr. Cohen

First of all, the former administration acted very promptly upon the passage of the Kerr-Mills Act. The law was approved by the President on September 13, 1960, and material was sent to the States by the Department 3 days later. The present administration has continued and accelerated stimulation of State action. This has been done in a number of ways. There are the speeches and articles of Department officials, including myself, urging States to take the necessary action to implement the 1960 legislation. State agency personnel, both administrators and technicians, came to Washington to participate in the development of policies and procedures for the implementation of the program. Consultation was made available to the States by the staff of the Department in Washington and by its regional staff. In 1961 some 12 official documents have been transmitted to the States on the subject of medical care, including medical assistance for the aged and medical care of old-age assistance recipients.

The amendments made to the old-age assistance program in 1960 were simple in nature and did not require the kind of interpretation to the States as did the medical-assistance-to-the-aged legislation. We have, however, made the same effort to help States to expand and improve their medical services.

As you know the 1950 amendments to the Social Security Act permitted payments directly to suppliers of medical care to public assistance recipients, including old-age assistance recipients. When the 1960 amendments increased the Federal share in these payments made to old-age assistance recipients, this type of provision was in operation in 43 States. Following the 1960 amendments five additional States have vendor payments in effect, three more have the necessary authorization. The remaining three—Alaska, Arizona, and Delaware require legislation. Of the 43 States that were making vendor payments before September 1960, 21 have improved their coverage or content from the level of that date. By January 1960, three States will expand coverage to the aged who are not in need of a money payment but are medically indigent. Eighteen States have not expanded their plan provisions from the September 1960 level, and one State requires legislation to take full advantage of the sums available under the Federal law.

Far from overlooking the importance of these developments, weekly reports have been issued on the status of these programs. In fact the information you cited on the advances made was derived from Departmental reports.

The Department strongly supports the 1960 legislation for we believe the States need help in meeting the medical requirements of the needy aged.

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Mr. Curtis

I would appreciate receiving copies of the speeches and articles of Department officials urging States to take the necessary action to implement the 1960 legislation, to which you refer in your letter, or sufficient reference to these speeches and articles so I may obtain them. Perhaps the trouble has been that the press has not given full publicity to these speeches and articles. Would you send me the publicity releases that accompanied these speeches and articles?

On the other hand, I am well aware of the undercover campaign being conducted by proponents of the social security approach to health care for the aged to denigrate the Kerr-Mills Act. We had a full impact of this in the testimony before the Ways and Means Committee in the recent public hearings, beginning with the morning testimony of Secretary Ribicoff himself. I saw no attempts by officials of Health, Education, and Welfare, including yourself, to contradict this effort and to deplore it. Instead, there seemed to be encouragement upon the part of officials in HEW to carry on these attacks.

The attack on the Kerr-Mills Act has been largely directed obliquely by striking at its use of a means test, to make it appear that a means test is degrading and antisocial. I believe the official position of Health, Education, and Welfare is in favor of the use of means tests in many of our welfare and educational programs. Certainly, a publicity campaign which encourages people to look upon means tests as degrading can make them somewhat that way. However, a positive program to point out the proper purpose means tests serve, and why they are not degrading, can move public opinion properly in the other direction.

In light of your letter, I want to protest again what I pointed out to Secretary Ribicoff during the hearings, that HEW has been misrepresenting the budgetary problems of our aged by the use of incomplete and, therefore, misleading statistics. On the expenditure side, HEW points up only the cost of health care in the older person's budget, which is greater than for any other age group, but fails to point out that every other item in the budget for people over 65—food, rent, clothing, recreation, etc.—is less than that of any other age group, and that the total expenditures in the budget for people over 65, including the larger health care cost, is less than that for any other age group. On the income side of the budget, HEW has pointed up individual income instead of head-of-family income and ignored the important items of homeownership, savings, and other possessions which the older people have in more abundance than any other age group. Here the Department has shown unfortunate leadership.

I would also like to point out again the absence

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Mr. Cohen

We further believe that the grant-in-aid approach alone through the old-age assistance and medical assistance for the aged programs, however, cannot be expected to meet the problems of our older citizens who become ill. States have moved as rapidly as possible to use the 1960 legislation and we have helped and urged them to do so. The experience thus far clearly shows that this method or approach alone cannot meet the problem the Nation faces.

Sincerely yours,

WILBUR J. COHEN, *Assistant Secretary.*

Man is the only animal that eats when he is not hungry, drinks when he is not thirsty and makes love at all seasons.

* * *

Who shall decide when doctors disagree?

* * *

The best doctors in the world are Doctor Diet, Doctor Quiet, and Doctor Merryman.

* * *

When one's all right, he's prone to spite
The doctor's peaceful mission;
But when he's sick, it's loud and quick
He bawls for a physician.

* * *

What is food to one man may be fierce poison to others.

* * *

I prefer to err with Plato.

* * *

By medicine life may be prolong'd, yet death will seize the doctor too.

* * *

Medicine, the only profession that labours incessantly to destroy the reason for its own existence.

* * *

There are some remedies worse than the disease.

* * *

I firmly believe that if the whole materia medica as now used could be sunk to the bottom of the sea, it would be all the better for mankind—and all the worse for the fishes.

* * *

A well-trained sensible family doctor is one of the most valuable assets in a community, worth today, as in Homer's time, many another.... Few men live lives of more devoted self-sacrifice.

* * *

A Merry heart doeth good like a Medicine.

* * *

Deceive not thy physician, confessor nor lawyer.

... From FAMILIAR QUOTATIONS by John Bartlett.
13th Ed. Little, Brown and Company.
Boston, Toronto, 1955.

Mr. Curtis

of leadership on the part of HEW in compiling and disseminating to the public accurate and up-to-date information about what is being done in the private sector in increased health insurance, added facilities, and skills for caring for the aged. The tremendous advancements that have been made in recent years in these fields was attested to by many careful studies presented to the Ways and Means Committee during the public hearings. This data should have been known, compiled, and disseminated by HEW. Certainly, after the hearings were completed, HEW should have helped in directing the public's attention to this data.

HEW still has not gathered pertinent information of what is being done at the county and local governmental level in the health care field and persists in issuing misleading information about what States are doing, minus this data. Many States operate their health programs primarily at the county and local level, rather than at the State level. HEW, in issuing its statistics, fails to note this important fact.

My statements in the CONGRESSIONAL RECORD of September 14, 1961, are mild when I think of the complete story of the negative leadership HEW has been giving to the country in this important issue of health care for our society.

I would be happy to have your further comments on this matter in rebuttal. I have no desire to be unfair, but I am determined to do the best I can to give the public as full and as balanced a picture of our health care programs as possible.

Sincerely,

THOMAS B. CURTIS

EXPOSITION OF HEALTH PROGRESS

April 6-16, 1962

Cranston Street Armory

BOOK REVIEWS

GOOD-BYE DOCTOR ROCH by André Soubiran. Doubleday & Company, Inc., Garden City, N.Y., 1961. $4.50

Doctor Georges Roch comes to Melum Psychiatric Hospital as the new medical director. Melum is in poor condition, even though the time is the present. Roch has a job trying to convince the board to change the rules, atmosphere and to offer better medical help. A patient, Jean Lascombe, shows such improvement that Doctor Roch puts him to work in the hospital library; he then goes on to become Doctor Roch's secretary.

Lascombe keeps a diary that is the major part of the book. Lascombe's wife, Colette, joins the "Friends of Melum Hospital" and comes to help and work for the hospital. With the doctor's and his wife's help, Jean returns to normal.

This book would appeal to anyone interested in the psychiatric patient. I have enjoyed the author's style of writing and felt he presented a clear picture of the problems confronting Doctor Roch.

DEBORAH ALDEN CLARKE

CARDIOVASCULAR DYNAMICS by Robert F. Rushmer, M.D. Second Edition. W. B. Saunders Company, Philadelphia, 1961. $12.50

This volume, like the first edition, can only be described as excellent! Doctor Rushmer has made full use of the old adage, "One picture equals a thousand words." By employing numerous schematic diagrams, he makes sometimes complicated physiologic and anatomic phenomena easily understood and, possibly, more easily retained.

This book is beautifully sectioned for continuity of context. All chapters were thoroughly enjoyed so that attempting to single out one or two of the more outstanding portions is difficult. The chapter titled, *Embryologic Development and Congenital Malformations of the Heart*, however, was probably my favorite. Here, Doctor Rushmer employs the same technique used in his classic movies of the same subject and makes a complicated discussion "simple."

CARDIOVASCULAR DYNAMICS will undoubtedly prove itself of great help to the student, house officer, general practitioner, and cardiologist. Although admittedly no attempt is made to cover the entire field of cardiovascular disease, this book will be useful as a ready reference for most aspects of this complex subject and as a steppingstone to more complete dissertations of any of the numerous phases covered.

Suffice it to end with the note that I recommend this text highly!

FRANK MERLINO, M.D.

THE MEANING OF DEATH. Edited by Herman Feifel, PH.D. Blakiston Division, McGraw-Hill Book Co., Inc., N.Y., 1959. $6.50

A substitute title might be *A Source Book on Death.* Eighteen essays on eighteen aspects of death and dying are grouped under the following sections: *I. Theoretical Outlooks, II. Developmental Orientation, III. Death Concept in Cultural and Religious Fields, IV. Clinical and Experimental Studies,* and *V. Discussion.*

The objective of the book is good. The attempt has been made, and successfully, to approach a subject about which everyone has ideas in an organized and systematic way. It is natural that the book is edited by a physician; it is natural that it should be of interest to physicians. Since all knowledge is of maximal value only when formulated and organized, this is a worthy beginning for studying a subject with which we have a great acquaintance but which is very poorly understood and seldom studied by the profession.

ROBERT V. LEWIS, M.D.

PREVENTIVE MEDICINE IN WORLD WAR II, VOLUME V, Communicable Diseases Transmitted Through Contact or by Unknown Means Prepared and Published under the direction of Lieutenant General Leonard D. Keaton, The Surgeon General, United States Army. Medical Department, United States Army, Wash. 1960. For sale by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C., $5.75

This is the fifth in the clinical series, PREVENTIVE MEDICINE IN WORLD WAR II, and like its predecessors is a detailed account of the activities

continued on next page

surrounding this group of diseases in the various theaters of World War II. The list of contributors and authors of the various chapters is an imposing one. Names long prominent in the field of epidemiology and preventive medicine are associated with this historical record of wartime communicable disease experiences.

Nearly half of the book (192 pages) is taken up with the venereal diseases. One would expect this of a group of diseases which early in the war was the greatest cause of non-effectiveness in the Army and never ceased to be a problem. The chapters on venereal diseases suffer from too much detail and repetition of the problems described in the various theatres. The policies toward venereal diseases and control measures varied in the different theaters, apparently depending upon the theater or unit commander. With the knowledge of venereal disease control available before the onset of hostilities, it is surprising that houses of prostitution and periodic and slip-shod examination of prostitutes were tolerated. This section of the book gives a fairly good insight into prostitution as it occurred during the war in various parts of the world. The appendix D has an excellent summary of venereal disease statistics during the war, with a total of 18 tables. The photographs, of which there are many in the venereal disease section, are technically excellent and interesting. The control of these diseases was more of a command problem than a medical one.

Many of the other diseases mentioned are little known and of not too great interest to the civilian reader in the temperate climate. Having little mortality, they exerted little influence on the Army Medical Department yet caused a certain amount of non-effectiveness. But some of the old familiar diseases were present and described in chapters on scabies, impetigo, poliomyelitis, mononucleosis, and hepatitis. There is a good description of the serum hepatitis epidemic that occurred after the use of yellow fever vaccine in 1943. This was the most extensive outbreak of serum hepatitis in U. S. military history. Nearly 50,000 cases occurred, due to this vaccine.

A large epidemic of infectious hepatitis occurred in the Mediterranean and Middle East theaters. When we note that the average hospital stay from hepatitis was 25-50 days, and that 20,000 cases were treated, we can see that the loss of time from this disease was terrific; particularly in view of the fact that at the beginning of the war it was not felt to be a serious problem. The entire epidemiological story of hepatitis during the war is well documented.

The objective of the book, to present a record of wartime experiences and to present historically the importance of communicable diseases as a hazard to the Army, has been achieved. There is much of value for civilian preventive medicine in this historical record. The medical man with a penchant for history will enjoy this book. For the student of venereal disease control, the revival of past errors from one war to the next will be interesting. The presentation takes account of advances in knowledge up to the time of writing of the book.

RAYMOND F. MCATEER, M.D.

DISEASES OF THE NEWBORN by Alexander J. Schaffer, M.D. With a Section on Neonatal Cardiology by Milton Markowitz, M.D. W. B. Saunders Co., Phil., 1960. $20.00

This is a truly indispensable book for every pediatrician and a thorough, compact monograph on the crucial neonatal period. The book groups disorders according to symptoms. There is an introductory chapter on the normal newborn and variations in length of gestation. The disorders are represented in X-ray films whenever possible. Especially useful are the X-ray pictures presenting disorders of the lungs and of the skeletal system. The incidence, etiology, pathology, clinical features (symptoms and signs), diagnosis, and treatment are discussed and illustrative cases presented.

A valuable aid is the enumeration of minor and sometimes easily missed signs. Most of the treatment recommended in the book is based on the author's first hand experience. This book is the first of its kind. It separates the newborn from the realm of general pediatrics and discusses it as a separate problem, constructing a specialty within the broad specialty of pediatrics.

SOPHIE M. WLASSICH, M.D.

ATLAS OF OBSTETRIC TECHNIC by J. Robert Willson, M.D., M.S. Illustrated by Daisy Stilwell. Deluxe edition. The C. V. Mosby Co., St. L., 1961. $14.50

There are several good texts on obstetrics but there has been no complete atlas of obstetrics technic which the medical student or physician could consult. Doctor Willson, who is professor of obstetrics and gynecology at Temple University School of Medicine, has successfully filled this void in obstetric teaching with this atlas.

The book contains a minimum of text. The first two chapters are devoted to the professional staff and labor and delivery room facilities plus a brief discourse on pain relief during labor and obstetric anesthesia. The rest of the fourteen chapters contain more than 300 concise and clear illustrations of the various obstetric operations with which a complete obstetrician must be familiar. Each chapter is introduced by a brief discussion of the indication, complication, and details of manage-

ment of the obstetric operation to be described. The remainder of each chapter is devoted to illustrations of the various steps in the operation described. The right-hand half of each page presents the drawings and the left-hand leaf a short description of each illustration.

The obstetric residents have received this atlas enthusiastically. Doctor Willson and Miss Daisy Stillwell who made the illustrations have made a real contribution to obstetric teaching.

WILLIAM J. MACDONALD, M.D.

APPRAISAL OF CURRENT CONCEPTS IN ANESTHESIOLOGY. Edited by John Adriani, M.D. The C. V. Mosby Company, St. Louis, 1961. $7.75

In brief and skillful form, the authors present a collection of reviews of contemporary concepts in the field of anesthesia. They deserve credit for compiling and condensing this large volume of clinical and experimental data into concise and highly informative chapters. These reports are not intended to be exhaustive reviews. They have been "prepared for clinicians, written in clinicians' language, and are intended primarily for clinicians," and in this respect, this book fulfills its objectives. To some clinicians, however, it will prove to be too abbreviated and in many instances overpositive.

The material is well chosen. Of especial practical importance are the chapters on extracorporeal circulation, pulmonary edema during anesthesia, and adhesive arachnoiditis. Each discussion is compressed into a few small pages, with the result that only the most highly pertinent and relevant factors are included. A glance at the bibliography that follows each chapter reveals that some of the more up-to-date publications have been omitted. For this reason the reader may well question the true value of some of the conclusions. In the chapter on infant resuscitation, for example, although mention is made that the initial expansion of the alveoli may require inflating pressures of up to 40 mm hg., the importance of a very short application (½ second) of this high inflating pressure is not emphasized. Nevertheless, it contains a wealth of information and is recommended as a ready and handy reference.

HERBERT EBNER, M.D. AND
JOSÉ D. SORIANO, M.D.

DIFFERENTIATION BETWEEN NORMAL AND ABNORMAL IN ELECTROCARDIOGRAPHY by Ernst Simonson, M.D. The C. V. Mosby Co., St. L., 1961. $13.50

This compact book of 328 pages is firmly bound, with a good quality paper and clear, readable type. The illustrations are, for the most part, of good quality and the tables and diagrams clearly presented and easy to follow.

This study is based on work performed over the last sixteen years and is a very considerable effort, on the basis of statistical analysis, to separate the normal from the abnormal in the electrocardiogram and to indicate the areas in which clear differentiation cannot be made. It gives considerable attention to the borderline tracing and endeavors to inquire into the types and sources of normal variability. Some of the chapter headings, which give some indication of the content, are as follows: Critical Review of Present Electrocardiographic Standards, Sources of Variability — Technical Variability, Sources of Biological Variability — Functional and Physiologic Variables, Sources of Biological Variability — Constitutional Variables, Normal Limits, Electrocardiographic Stress Tolerance Tests, and Minor Electrocardiographic Changes.

One of the best features of the book is an extensive bibliography, to which frequent reference is made in the text. There are many clinical suggestions of value, such as the presentation of evidence that the disappearance of the Q wave in lead III with deep inspiration by no means indicates that this is a normal finding. Instances are presented where this disappearance has occurred in the presence of proven posterior infarction. There are many tables of ECG measurements related to age and sex and much of the material is analyzed statistically.

In general it would appear that this well-documented work should be of real interest and value to the careful student of electrocardiography and stimulate fresh thought and analysis of several time-encrusted beliefs. For one with only casual interest in the electrocardiogram, it would provide heavy going.

F. B. CUTTS, M.D.

THE HAND. A Manual and Atlas for the General Surgeon by Henry C. Marble, M.D. W. B. Saunders Co., Phil., 1960; reprinted 1961. $7.00

This is a compact volume containing a wealth of useful information for the general surgeon. It is not an exhaustive study of hand surgery, but it contains 199 pages of fundamental material for the surgeon who does sporadic work on the most useful member of the body. Initially, it deals with the anatomy and physiology of the hand, and this review is made easier with numerous anatomical views. Personal cases and experiences are cited in place of a bibliography.

Almost half of the book is taken up by the management of fractures and open injuries. This includes reduction of fractures, splinting, tendon

concluded on next page

repairs, skin grafting, and even nerve blocks. No book of this nature is complete without a section on infections. Most of these have their beginning in the most trivial of wounds, where a little knowledge of the injury and the type of infection can shorten the disease and the disability of the patient, and save a finger here and there.

Tumors received little more than mention. The author felt that these were not serious problems in that tumors on the whole were benign, he having seen only three or four malignant tumors in his practice.

CARL V. ANDERSON, M.D.

LIGHT COAGULATION. By Gerd Meyer-Schwickerath, M.D. Translated by Stephen M. Drance, M.D. The C. V. Mosby Co., St. L., 1960. $9.50

It has been known since ancient times that the sun has the power to destroy sight, and burns of the macula are still seen after every solar eclipse. This monograph by the professor of ophthalmology at the University of Bonn, deals with the therapeutic use of radiant energy in closing retinal and macular holes or tears, the treatment of several types of vascular disease, and the destruction of neoplasms of the retina, choroid and iris.

Radiant energy must be absorbed to produce an effect and this allows its harmless passage through the refractive media of the eye. Experimental data leading to the selection of the high pressure Xenon lamp as the energy source is presented, and the instrument constructed by Zeiss is described.

Retina which is elevated cannot be coagulated because it absorbs very little light. For this and other reasons the method can be used in prophylaxis, but not in treatment of frank retinal detachment. Several rare vascular diseases of the retina have been successfully treated.

The evidence for treatment of intraocular tumors leaves much to be desired, but the results suggest its trial when the fellow eye is blind.

H. FREDERICK STEPHENS, M.D.

MEMORIES FROM THE PIONEERING DAYS

"Harefuah"* is now publishing a series of articles in which veteran Israeli doctors describe some of their experiences during the pioneering days of Jewish settlement in this country.

Here is an extract from the reminiscences of the late Dr. Zalman Avigdori:

Forty years ago, when I was working as the physician at the hospital in Tiberias, I was called urgently to attend a woman who had given birth three hours previously; the placenta had not come down and she was bleeding profusely. I was the only doctor in the hospital and some of my patients were dangerously ill; I was afraid of leaving them but I was even more afraid that I would harm rather than help the unfortunate mother, since I had little experience in obstetrics. I then remembered that Dr. Joseph Asherman, (now Professor Asherman of Tel-Aviv) who had been sent by the Hadassah organization to look after the workers engaged on building the Tiberias-Zemach road, had told me that he had worked as a gynecologist and obstetrician in Prague. Dr. Asherman was now in charge of the small hospital which had been established for the road-workers at nearby Hame Tiberia. I immediately sent him a message asking him to attend to the case. Two hours later, Dr. Asherman came to see me at the hospital and told me how he went to the patient's house, asked her husband a few questions and immediately went into the kitchen to scrub his hands. However as he approached the patient's bed, the local midwife jumped up and forcibly tried to prevent him from treating her. The midwife thought that this young fellow (Dr. Asherman was then some thirty years of age), who was wearing an open-necked shirt and shorts, would do the patient grievous harm. Dr. Asherman pushed her away with a none too gentle movement of his foot, since he did not want to dirty his hands. The mid-wife, dumbfounded by the strength of this "goy" (gentile), fled from the scene, and Dr. Asherman extracted the placenta, gave the patient an injection and left her after her condition had improved.

Some days later, I was invited to the home of Mr. B. Ben-Tovim, the manager of the branch of the Anglo-Palestine Bank in Tiberias. Among the guests was the midwife who related her version of the incident. Next day, Dr. Torrance (the Doctor of the Missionary Hospital in Tiberias) returned to Tiberias and he was called in to see the patient; he found that she was in good condition and that Dr. Asherman had given her the correct treatment. The midwife who was also present could hardly believe it and she asked (in Yiddish) "Is a doctor who works on the road also a doctor?"

... Excerpt from Quarterly Review of the M. H. H. (Non-Resident Fellowship of the Israel Medical Association), Vol. 1, No. 1, Jan.-March, 1961, Jerusalem.

***Former designation of the M. H. H.**

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References: (1) Pulaski, E. J., & Taylor, L. W.: *California Med.* **92**:35, 1960. (2) Finland, M.: DM: Disease-a-Month, Sept., 1960, p. 3. (3) Monsour, V.; Bernard, H. R., & Cole, W. R.: *Missouri Med.* **57**:1006, 1960. (4) Welch, H., in Welch, H., & Finland, M.: Antibiotic Therapy for Staphylococcal Diseases, New York, Medical Encyclopedia, Inc., 1959, p. 14. (5) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* **173**:475, 1960. (6) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* **105**:398, 1960. (7) Goodier, T. E. W., & Parry, W. R.: *Lancet* **1**:356, 1959. (8) Lind, H. E.: *Am. J. Proctol.* **11**:392, 1960.

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(Jerome Pollack, Program Consultant, Social Security Dept. of the United Automobile, Aircraft and Agricultural Implement Workers of America, presented at the New England Blue Shield Seminar, Rhode Island, September 23, 1961)

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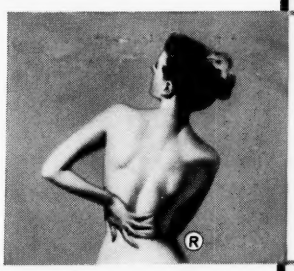

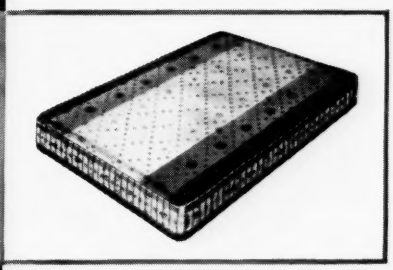

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* * *

Guest Lecturer:

SAMUEL A. LEVINE, M.D.

of Boston

Subject: "CLINICAL CARDIOLOGY — THEN AND NOW"